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THE LOGIC OF PUBLIC INVESTMENT

State of the Debate

THE AMERICAN PROSPECT

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COVER: **CHRISTOPHER BING**

ILLUSTRATORS: **DAN YACCARINO** (page 35), **BOB DAHM** (pages 43, 47), **CHRISTOPHER BING** (pages 81, 73, 117).

The Moral Equivalent Of War Production

Robert Kuttner

Restoration of robust growth is the paramount challenge facing the nation, the most significant issue of the 1992 election, and the first task that will face a new administration. Indeed, all other important public questions are being held hostage to a sick economy that depresses aspiration, increases unemployment, depletes revenue, and makes public remediation seem unaffordable.

Many serious commentators have lately concluded that nothing can be done to cure the depressed economy, save to depress it further via budget balance and wait for private confidence to return. The discussion bears an uncanny similarity to that of the late 1930s, when the economics journals were filled with gloomy assessments of something called "mature capitalism." After a full decade of depression, many economists concluded that 12 percent unemployment, static living standards, and 1 or 2 percent annual growth were the best a mature market economy could do.

An abrupt event on nobody's economic radar screen—World War II—settled the debate in short order. A market economy, with a strong dose of public investment, could and did grow at better than 10 percent a year. Full employment was indeed attainable. The war was simultaneously a recovery program for the nation, a recapitalization of industry, a technology policy, a retraining program for labor, and a force for social progress. In a more attenuated sense, the Cold War played something of the same role.

It seems a shame, of course, that government should only have this potent effect on the collective organization of idle resources as the incidental byproduct of a war, especially since war blows up most of what is produced. As economic policy, war stimulus burns barns to roast pigs.

Like the false remedies commended to cure it, today's economy also recalls that of the late 1930s. For the first time since the Great Depression we are experiencing a deflation, though it is contained somewhat thanks to stabilizers that conservatives have been unable to repeal. The real estate bust is the most dramatic emblem, but wages and consumer buying power are falling, too. In a deflation, the market price of an asset plunges and its earning potential is not sufficient to pay its debt. Banks, in turn, suffer from depressed payments by debtors, and become skittish about extending new credit. Banks were none too healthy even before the deflation began, thanks to unintended consequences of financial deregulation.

Unlike the 1930s, the stock market has not yet suffered a severe deflation (as of this writing), but that uneasy buoyancy is the mechanical result of steady reductions in interest rates by the Federal Reserve. When interest yields are low, investors shift into stocks, which bids up their price. However, the Fed's cheap money policy has just about reached its logical limits, especially given the escalating international pressure against the dollar.

Although public debate has emphasized whether the economy is technically in or out of mild cyclical recession, the deeper problem is long-term stagnation. Whenever the current recession ends, not even the

White House economists are forecasting a return to robust growth any time soon.

Miraculously enough, the Democratic nominee, unlike his two immediate predecessors and at least one of his primary opponents, has not succumbed to the calls for a deflation cure. Clinton has called for a moderate program of public investment, though he has not fully parsed out all of its economic implications. As president, he would need the intellectual clarity and political resolve to persuade public opinion to support outlays of a magnitude that could do the job properly.

The 1992 election thus offers an implicit three way debate between supply-siders who want to restore growth via tax breaks, deflationists of both parties who would make budget balance paramount, and advocates of a World War II-style cure.

That debate needs to be put into sharper focus.

This issue of *The American Prospect* contains a special cluster of articles on the logic of public investment as the necessary cure for a stagnant economy. We who offer public investment need to articulate a compelling logic, for this approach flies in the face of several conventional wisdoms about the disabling constraint of the deficit and the limited competence of public endeavor.

Public investment can cure slow growth in four distinct respects. The first two are macroeconomic; the final two are structural.

First, in a deflated economy public investment bridges over the failure of private firms and individuals to invest, given their accurate perceptions of depressed consumer purchasing power. It thereby raises the investment rate directly, which is the key to growth, and puts idle people back to work. In many center cities, where commercial vacancy rates are 25 and 30 percent, we will wait decades for private developers to pour much concrete. But an accelerated bridge, tunnel, rail, highway, or water and sewer program could get concrete poured within a few months, most of it via private contracts that would generate private sector earnings and private employment.

Second, in a global economy, ordinary macroeconomic stimulus of private consumption via tax cuts and deficits partially "leaks" into purchases of imports that do little to restore domestic growth. Instead, conventional stimulus buys only chronic trade deficits as well as budget deficits. A virtue of public investment is that almost all of it is spent domestically.

The third effect has to do with how public investment facilitates private productivity. Goods need to get to market, and workers need to commute to their jobs. Besides transportation, a modern economy also depends on reliable energy and telecommunications. Research by economists Alicia Munnell, David Ashauer, and others has demonstrated that public infrastructure investment is a necessary complement to private sector productivity growth. But in the 1980s, basic investment in infrastructure declined to less than half its normal postwar rate.

Finally, public investment often leads technological advance, which is the microeconomic source of growth. During the Cold War era, this public outlay energized technical advance, primarily via military spending. That military technology policy now needs to be civilianized or it will be lost.

Thus the convergence of several factors—the end of a long era of military stimulus, the trauma to private lending institutions, the depressive effect of price deflation, the high-debt aftermath of Reaganomics, the inability of private investors to commit enough capital—all point to public investment as the only alternative to chronic stagnation.

The program is "Keynesian" not via increased demand, but via increased investment, recognizing that over the long term it is investment that drives growth. It will certainly have short-term anti-recession benefits, too—however the real point is not merely to accelerate recovery from the cur-

rent business cycle recession, but to get the economy back on a high growth path of the sort that powered the long postwar boom.

The public investment strategy is all of a piece, and should be understood in its complete logic. In this issue of *The American Prospect*, the historian Doris Kearns Goodwin, author of a forthcoming book on the World War II economy, reflects on the lessons of 1942 for 1992. Michael Borrus reviews the beneficial effects of public investment on technology. Ralph Nader and colleagues point to the innovative potential of government procurement. Jay Stowsky and Burgess Laird consider one key conversion dilemma—how to turn the national laboratories from military to commercial ends. Peter Stone examines one leading candidate for public investment: high-speed rail. Steven Kelman rebuts the favorite conservative charge that public investment will necessarily degenerate into pork barrel. Bennett Harrison looks as the various structural reasons why private investment cannot lead a recovery. And David Casagrande reviews the literature of the military conversion debate. In future issues, we will examine the human-capital aspect of public investment.

Besides its economic benefits, this strategy offers one compelling political benefit. It restores the link between liberals and economic growth, without needlessly sacrificing equity. For more than a decade, repentant ex-liberals have chanted a demeaning mantra about giving up their obsession with dividing the economic pie, the better to begin expanding it. Meanwhile, conservatives have etched into the public consciousness the claim that a "growth measure" was necessarily one that cut taxes on the well-off.

The morning after Reaganomics should finally lay the conservative claim to rest. A post-mortem on the 1980s reveals that supply-side tax cuts raised the rates of neither savings nor investment, while it doubled the national debt to no constructive economic purpose. And with that verdict in, and the public debt now in excess of half one year's GNP, a second round of supply-side tax cutting would be a much greater folly than it was in 1981. Conversely, investment-led growth should finally relieve liberals of the neurosis that they favor distribution at the cost of expansion.

What of the chronic deficit and the debt? They are millstones all right, but they must not prove disabling. Today, the debt held by the public is less than half of what it was in 1946. At the end of World War II, the national debt stood at 119 percent of one year's GNP. But that debt had not just bought tanks, planes, and bombs. It had renovated America's physical and human infrastructure. As Robert Reich suggests, investment is not just a euphemism for current spending. Whether public or private, debt directed towards expanded investment increases growth. We can—indeed, we must—incur expanded public debt if

we do so wisely. Once a higher rate of long-term growth is restored, the debt will gradually shrink as a share of GNP, as it did for thirty-five years until Ronald Reagan occupied the White House.

The 1980s badly tarnished the public sector as an engine of public purpose. Even many liberals began to doubt whether public endeavor could be salvaged. But we had better begin refurbishing government's capacity for collective purpose, and fast. For in this economy we are going to need it.❖

Passion, Memory, and Politics, 1992

Paul Starr

From its founding nearly three years ago, *The American Prospect* has sought to help reconstruct a plausible and persuasive liberalism. This issue's cluster of articles concerned with a public investment strategy for economic growth exemplifies that purpose: substantive, detailed thinking about how to solve the nation's problems, rather than symbolic gestures. Yet, as this political season has reminded us, there is another aspect to the conflict over public ideas in America that is inevitably and properly symbolic. It is a battle over cultural ideals, ways of life, the meaning of the past. And that conflict is inseparable from the hard choices in economics, social policy, and even foreign affairs.

Clashes over cultural ideals and ways of life are hardly new in the United States. The passions aroused by the temperance movement as this century began were not wholly unlike those aroused by today's conservative crusades for "family values" and against abortion and gay rights. Temperance, in fact, was a "pro-family" issue in its day. Yet the present conflict, whatever its deeper historical continuities, dates fundamentally from the 1960s, and it is striking how much that decade continues to preoccupy, bedevil, and divide us.

The sixties seem to return at nearly every juncture. As the war with Iraq began, the nation argued about whether it would be "another Vietnam" (it wasn't), much as a prior generation had debated matters of war and peace worrying whether some incident would become "another Munich" or "another Sarajevo" (we can now appreciate the latter reference). Press stories about Bill Clinton's draft record and whether or not he inhaled prompted another round of reflection: Could the generation of the sixties ever be free of its past? Could the nation ever trust anyone who was *under* thirty in 1968?

And when Los Angeles erupted in riots and flames, Marlin Fitzwater, the White House spokesman, peered over the city and, astonishingly, saw the words "the sixties" traced by the smoke. Again we were back to the same argument, in a slightly different version: Was the Great Society to be held responsible for urban disintegration and violence today? (According to a *Los Angeles Times* poll in early May, few thought it should, and roundups of Medicare, Headstart, and other surviving programs from that era turned up no plausible suspects.) Meanwhile, "JFK" was playing at your local theater, forensic cultural historians hovered over Marilyn's deathbed looking for fingerprints, and the music of the 1960s that was once damned as subversive had literally been turned into advertising jingles. The lyrics have been changed, but the melodies and the gunshots linger on.

Yet the memory of the 1960s does not simply linger; it has become a source of power for some, of weakness for others. The rise of conservatives at the national level dates to 1968, the waning of liberal influence to the same period. In the 1992 election, the Democrats are still trying to shake off the taint of the sixties, the Republicans are still trying to run against it.

At their convention in New York this year, the Democrats tried to overcome and put behind them the cleavages that opened in their own ranks and the larger society in the sixties. At their convention in Houston, the Republicans proclaimed a "cultural divide" (Dan Quayle), and even a "religious war" (Patrick Buchanan), trying to stoke the embers of old antagonisms into a roaring blaze that would consume the Democrats.

From a social and cultural standpoint, the Democrats have become the party of peace, the Republicans the party of war. If conservatives in the Republican Party cannot summon supporters to fight the archenemy in Moscow, they can at least summon them to fight the Anti-Christ in Hollywood or New York. In short, they can make liberalism the moral equivalent of communism, the "cultural elite" the equivalent of the Politburo, and the battle against them the equivalent of war. Some might have thought that once the Cold War was over, the right's leaders would no longer question their opponents' loyalty. But it seems they have more reason now than ever: Without communism as a unifying force, even moderate Democrats must be made into enemies of the American way of life. This is dangerous—to the civility needed for political cooperation, to the tolerance needed in a heterogeneous society, and most of all to the truth.

To be sure, the Democrats have not rejected, nor should they, all the social and cultural changes we associate with the sixties. By and large, the major social programs of the decade still stand, many of them, like Medicare, beyond partisan controversy. But the differences between the parties on the meaning of the sixties are clear enough. Unlike the Republicans, the Democrats not only accept the changed role of women but favor policies, such as family leave, that facilitate and advance that change. And the Democrats have incorporated not just feminism, but even gay rights, which would have been truly inconceivable before the sixties. Even if one had never heard of Ron Brown or Bill Clinton, it would not be difficult to guess which party has a national chairman who is black and a presidential candidate who rock 'n' rolls.

Yet Democratic leaders, and liberals more generally, now recognize that the path they took in the late 1960s—or, to be more accurate, some turns on that path—led them into the electoral wilderness. In both its public and private expressions, the ethic of expansive entitlements seemed to deny limits, whether in personal conduct or government expenditure. Of course, not all liberals or liberal programs, much less all Democrats, had such an ethic, but enough did to make credible the charge that liberals did not know *where to draw the line.* So now they must reassert, as an earlier generation of liberals once did, an ethic that emphasizes prudence and responsibility as much as rights. The New Covenant—a poor slogan, perhaps, but a good idea—is an expression of that renewed emphasis on the norm of reciprocity rather than entitlement.

Similarly, rather than emphasize separate programs for the poor, the Democrats now put priority on growth and full employment, as did liberals from Roosevelt to Kennedy. There is a symbolic as well as substantive change here: The Democrats are making the values as well as the interests of the middle class, not the poor, their point of reference in social and economic policy. Some on the left, whose conception of progressive politics was formed in the 1960s, consider this revival of Rooseveltian liberalism a retreat. But what the poor most want is to join the middle class, not to reject it. Those who care about the poor serve them best by identifying them with the middle-class majority, not by distinguishing them from it. In the 1960s, the movement for racial equality correctly argued that civil rights could not depend on majority vote; blacks were entitled to equality of respect regardless of whether a majority of whites approved. That experience, however, led some liberals to treat other types of minorities, such as the poor, as groups whose interests demanded satis-

faction regardless of majority approval. From advocating civil rights, they slid into advocating welfare rights as equally imperative. As a point of democratic theory, this was doubtful; as a matter of democratic politics, it was a disaster. Today's changed views of welfare, child support, and other policies all reflect a chastened respect for the culture and pocketbook interests of the nation's middle-class majority.

This is not an abandonment of liberalism; it is more like a return to what liberalism stood for, at least in the minds of its most persuasive advocates, before the late 1960s. The liberalism of the World War II generation, epitomized by such people as Reinhold Niebuhr, had a much stronger sense of both human limitations and the limits of social reconstruction. In the sixties, we sang, "We shall overcome," but unfortunately, many of us were overcome—and now have come back. If the effort currently under way in the Democratic Party succeeds, it will be not simply a matter of a new administration, but the end of an estrangement from a tradition. There is much talk about a sustainable economy and environment; we also need a sustainable politics, grounded in a realistic appraisal of national sentiment as well as the national interest. In a democracy, this is not optional, except for those satisfied to grumble rather than to govern.

In the nation's memory today, the great counterpoint to the 1960s is the 1940s, remembered as a time when America was at once simpler, more serene, more unified, and more powerful. The movies, songs, old magazines, even the social critics of that period have acquired a rosy glow. Harry Truman's prestige is so high that George Bush, who surely voted for Tom Dewey, now says the Missouri New Dealer is his model. Of course, some of the longing for the forties is for a period when America was clearly on the rise, and when the problems of race and poverty did not appear intractable (in part because they were hardly thought about at all). But, as Doris Kearns Goodwin reminds us in this issue, the 1940s were in many ways a more liberal period than today, and they offer us a remarkably bold precedent for liberal remedy. Even as we take caution from the sixties, we could do worse than take courage from the forties.❖

C O N T R O V E R S Y

Race, Liberalism, Affirmative Action (III)

We continue the debate on the future of affirmative action in response to Paul Starr's "Civil Reconstruction: What to Do Without Affirmative Action," TAP, *No. 9, Winter 1992.*

A Tribal Century?

Rogers M. Smith

Discussion of the candidacies of Pat Buchanan and David Duke, even of the Los Angeles riots, have faded. But they should remain troubling. They are part of a broad, all-too-familiar pattern of resurgent bigotry in American public affairs. That pattern extends to some titularly on the left, such as anti-Jewish City College of New York professor Leonard Jeffries. But it is reinforced when liberals play it safe by distancing themselves from the issue of racial equality.

To be sure, that stance is tempting. Recent expressions of bigotry may be mere vestiges of a prejudice-scarred past that merit only benign neglect. Perhaps the modern civil rights movement achieved too much for the U.S. ever to regress

dangerously. But it is equally possible that such expressions are grim heralds of new growth in those hardy American perennials, racism, nativism, and misogyny. The nation has, after all, made great strides before, only to reverse course sharply.

In fact, the progress in providing rights for all citizens in the 1960s and the early 1970s broadly resembled the advances made exactly 100 years earlier, during the Civil War and Reconstruction. That parallel is not reassuring. Reconstruction gave way to a massive, successful rebuilding of vicious racial and gender hierarchies in American law and life. The task of restructuring political, economic, and social institutions to provide egalitarian opportunities threatened the material interests and moral beliefs of many Americans. Lacking the imagination and nerve to confront those fears, champions of change gave up trying to persuade most whites that a truly liberal, democratic society could be as sustaining as traditional arrangements. It is frighteningly easy to find analogies in what is happening in America now.

In the 1860s and early 1870s, a war for national preservation led the U.S. government to support long-standing quests for racial equality. The results included the three postwar amendments, freeing blacks and making them citizens, and many statutes, from the 1866 Civil Rights Act through the 1875 Civil Rights Act.

The Reconstruction reforms included more than civil rights bills: special programs to aid blacks economically, via the Freedmen's Bank and the Freedmen's Bureau, and efforts to expand public education in the south and throughout the country for blacks and whites. The struggle for black rights also stimulated the American women's movement. Leaders like Elizabeth Stanton and Susan Anthony built political networks through their work for emancipation. In return, abolitionists and Republican leaders promised to support equal rights for women.

The Civil War also led the Union to spur immigration, through contracts offered to foreign laborers during the war and via the 1868 Expatriation Act. It promised the nation's protection to all who gave up their native allegiance to join the United States.

Finally, the Civil War era rejuvenated America's progressive intellectual traditions. Christian affirmations of the worth of all human beings were elaborated in abolitionist views. Enlightenment traditions of human rights took on richer meaning, as white and black, male and female reformers all expounded them. Their efforts carried the nation's founding commitments to human dignity and emancipation further than ever before.

The 1960s and early 1970s do not pale in comparison. Again, changes were set in train by war, first the struggle against racist, totalitarian regimes in World War II, then the Cold War campaign to avoid Communist expansion, especially in new, usually non-white, Third World nations. In this context, the U.S. government felt compelled to set its own house in order and again began to aid efforts to win equal rights for black citizens. The judiciary returned to broad readings of the Civil War amendments, starting with *Brown v. Board of Education*. Over the next dozen years, Congress passed, and executive officials enforced, many new civil rights bills, notably the Civil Rights Act of 1964 and the Voting Rights Act of 1965. The judiciary gave these laws wide scope as well. Again, the initiatives were not simply in civil rights. Lyndon Johnson's war on poverty established programs to combat minority economic hardships, including job training and child support programs such as Head Start. The nation also undertook extensive aid to public schools via the 1965 Education Act.

Like its nineteenth century predecessor, the modern women's movement was energized by its contemporary civil rights movement. By 1973, many legal inequalities had been eliminated, the Supreme Court had affirmed abortion rights and had almost declared gender discrimination con-

stitutionally suspect. Meanwhile, a majority of the states ratified the Equal Rights Amendment.

Immigration was encouraged, this time by the 1965 Immigration Act and the 1968 Bilingual Education Act. The first law ended the racially based national quota system that had for forty years curbed America's ethnic diversity. New immigrants from Asia and Latin America came; for many, bilingual education eased their transition into their new country.

In American intellectual life, Christians and other believers played leading roles in these reform movements, and liberal democratic theories of human rights found fresh expression within universities. But if the nineteenth and twentieth century reform movements shared a vision, it appears that they may also share the same fate—premature abandonment. The dismantling of post-Civil War reforms was as broad as it was swift. Not long after the Civil War, the Republican party decided that its identification with efforts to help blacks was costing it too many white votes. Republican politicians first gutted all the programs of special assistance for blacks, like the Freedmen's Bureau. And Supreme Court Justice Joseph Bradley, who had once read civil rights laws generously, echoed many formerly radical Republicans when he wrote in the 1883 *Civil Rights Cases* that it was time for the black man to cease "to be the special favorite of the laws" and to have his rights "protected in the ordinary modes by which other men's rights are protected." That protection proved a mirage. From the 1890s on, the federal courts encouraged the proliferation of a new, long-lasting legal structure of racial hierarchy, the Jim Crow system of segregation, grandfather clauses, white primaries, and inferior or no schooling for blacks.

The postwar women's movement rapidly disintegrated, finding itself abandoned by most male supporters and internally divided. Two rival woman's suffrage organizations formed. The more conservative group, which stressed the public value of women's domestic virtues rather than equality, increasingly set the agenda for women generally. Although women finally received the vote in 1920 via such advocacy, this conservatism proved consistent with the spread of restrictive "protective" laws that denied women innumerable economic and political opportunities.

The U.S. maintained its commitment to open immigration longer, but in the 1880s it excluded Chinese laborers. By 1900 the targets encompassed all Asians and all southern and eastern European immigrants. In 1924, exclusionists established the national origins quota system, permitting immigrants only in ratios that preserved the dominance of Americans of white, northern European ancestry.

In the late nineteenth century, American Protestantism had taken a fundamentalist turn that was often nativistic. And under the influence of Darwinian evolutionary theories applied to the races, as well as cultural theories of how history generated fundamentally different peoples and cultures, the new American university disciplines, and the progressive-era reformers they spawned, were almost all profoundly racist. Academics provided "scientific" and "historical" analyses that favored Jim Crow laws and immigration restrictions. Many black leaders retreated under this onslaught, first to the separatist self-help philosophy of Booker T. Washington, then to the despairing "Back to Africa" advocacy of Marcus Garvey. To be sure, Progressive thinkers like Horace Kallen favored egalitarian tolerance of all races and cultural groups. But they did so by stressing how each group was ineradicably shaped by a unique cultural heritage and by deprecating the common national identity of Americans. Those arguments played into the hands of hate merchants like the Ku Klux Klan, who agreed that Catholics, Jews, blacks and new immigrants were different—too unalterably different to be tolerated.

The upshot was that fifty years after

Reconstruction, the U.S. had legal systems of immigration exclusions, apartheid, de jure and de facto limits on the rights of minorities and women, and intellectual theories of racial and gender inferiority that were more elaborate and pervasive than before the Civil War. Small wonder that the distinguished historian John Higham has termed this period the "Tribal Twenties."

Can it happen again?Today many in the reform party of the 1960s, the Democrats, believe they have lost votes because of their identification with special assistance for minorities and women. Southern conservatives in the Democratic Leadership Council have regularly called on the party to appeal to "ordinary people" instead of "special interests." In his campaign, former DLC chair Bill Clinton has nonetheless endorsed some affirmative action measures. But liberal scholars in his camp like William Julius Wilson and Paul Starr have gone further. Like Justice Bradley, they contend the time has come to abandon all "targeted" programs in favor of "race-neutral" ones. (Starr does advocate private "targeted" efforts to strengthen "minority institutions" but not public ones aimed at integration.)

Republicans have gained and held the White House while scapegoating the poor and minorities for the failings of the nation's economic policies, schools, and criminal justice system. They have won cuts in social spending for these groups and weakened civil rights enforcement. Republican appointees to the federal courts have read civil rights laws so narrowly that even the Bush White House has demurred, and they have challenged all affirmative action measures not explicitly authorized by Congress.

As public schools have declined and resegregated, the most discussed remedy today, as in the post-Reconstruction South, is to privatize them, with increased economic and racial polarization a likely result. The modern women's movement failed to win the ERA, partly because many women still thought their distinctive domestic role ought to remain legally codified. Judicial activism for gender equality has correspondingly waned, with constitutional abortion rights shrinking.

U.S. immigration policy, in contrast, became somewhat more open in the 1980s. But in 1986, employer sanctions were adopted in a futile effort to still illegal immigration. More recently, proposals have surfaced to alter the family preference system in order to favor the countries of origin of older-stock U.S. citizens, such as Irish-Americans. Pat Buchanan's voters may have been primarily unhappy about the economy, but none seemed disturbed by his calls to restrict immigration and avert "the landfill of multiculturalism." Tensions over new Asian and Latin American immigrants are also visible in the "English Only" movement, the popularity of Japan-bashing books, and mounting incidents of harassment.

In American intellectual life, the nation's most thriving Christian denominations have again gone in theologically fundamentalist and politically conservative directions. Overtly racist doctrines remain marginal in universities; but there are disturbing signs. Some on the right, such as the philosopher Michael Levin and various sociobiologists, are once more suggesting a genetic basis to differences in racial achievements. In a widely and respectfully reviewed book, law professor Richard Epstein has urged repeal of the 1964 Civil Rights Act. Some black intellectuals and political leaders like Clarence Thomas are again embracing "self-help" philosophies that amount to acquiescing in ongoing inequalities for most poor blacks. Others, like Louis Farrakhan, are reviving illusory dreams of full black separatism.

Many of the scholars who criticize targeted programs also identify an ethnically and behaviorally defined "underclass." This is said to be a largely black and Hispanic stratum that, whether from social conditioning or other sources, is ineradicably morally pathological—irresponsible, unwilling to work, and violent. This underclass is, in short, much like portraits of inferior peoples painted by turn-of-the-century racists. Yet it is doubtful

that many of the urban poor hold values very different from those, good and bad, visible in mainstream America. The evidence about the "underclass" is often aggregate statistics and anecdotes instead of systematic observations of the actual individuals behind those statistics, who can often be shown to have struggled hard to improve their lot, albeit unsuccessfully. Nor are violence, fiscal and parental irresponsibility, and drug abuse confined to urban minorities. Yet many have quickly accepted that "the underclass" is a real and growing threat. Incitements against it formed the most popular staple in David Duke's rhetoric. On the left, many minority and feminist scholars are emphasizing the socially constituted "difference" of their perspectives, often in illuminating ways. But like their progressive forebears, sometimes these writers fall into the trap of portraying groups as so hopelessly distinct that efforts to work together seem utopian. And a few, like Jeffries, are plainly guilty of ethnic hatemongering themselves.

So yes, identifying the liberal cause with further public efforts to achieve racial progress is politically risky. But the parallels between our time and the late nineteenth century suggest that the risks of not fighting hard for social justice may be even greater. And after all, moderate Democrats who stressed economic growth have not done too well in recent presidential elections. Only outsiders promising change, of all ideological stripes, have generated political excitement. If liberals refuse to be outsider champions of racial and gender progress, might not outsider champions of injustice grow ever bolder and more successful?

Major differences between 1892 and 1992 do exist. Then, the international context of European imperialism validated America's new racist domestic laws, as well as its new colonial ventures. Today the U.S. seeks to lead a world filled with independent nations of color. Perhaps as a result, modern race-based candidacies from Wallace through Buchanan and Duke have been insurgencies, opposed by major party leaders. Proposals of insurgents have often been adopted by major parties, however; George Bush's racial policies are only gentler echoes of Buchanan and Duke. Calls for "race-neutral" public policies and private aid to separate minority institutions, moreover, risk creating an America of largely unintegrated middle-class blacks, combined with neglect or even punitive treatment of the disparaged "ethno-underclass." Those conditions would provide fertile soil for resurgent racism.

If the past is prologue, the parallels between the late nineteenth and twentieth centuries at least suggest that Americans should be worried. Abandoning this country's unfinished struggle against racism will only clear the way for a new tribalist era—one that, sooner or later, we may again have to overcome.

Paul Starr Replies:

Rogers Smith equates those who favor an emphasis on economic policies for full employment and high growth and social policies that are universal in their benefits (such as national health insurance) with the abandonment of progressive policies at the end of Reconstruction. This is a curious analogy; apparently, in Smith's mind, the New Deal was a reactionary period.

For the record, Smith is simply wrong to say that I have opposed public efforts "aimed at integration." To support stronger institutions in minority communities is not the same as opposing integration, nor is it tantamount to calling for a revival of "tribalism," unless Smith equates the diverse institutions and associations of other ethnic and religious groups in American with tribalism. Moreover, if tribalism is the problem, why are the race-conscious remedies advocated by Smith the solution? Nothing is as likely to intensify the problem he is worried about than the solution he favors.❖

Letters

Advocating Advocacy

To the Editors:

John Judis's article on the gentrification of advocacy groups treats Citizen Action favorably but doesn't go as far as its record warrants ("The Pressure Elite: Inside the Narrow World of Advocacy Group Politics," TAP, Spring 1992).

A few years ago, I studied Ohio Citizen Action, a state affiliate of Citizen Action, and tried to answer this question: To what extent do the donors to a group's door-to-door canvass behave as truly active members of the group?

Interviews and observation and focus groups show that the answer is what common sense suggests. If the group enables supporters to play an active role, as OCA does, then many who were originally reached by a canvass will behave not only as passive donors but as active members.

Donors act as members by taking part in activities in OCA's local chapters: meetings, issue campaigns, public hearings, ballot initiatives. Less apparent but just as real is how deeply such people support OCA, even if they don't always take part in its visible activities. They closely follow its newsletter, engage canvassers at the door, write letters, make phone calls, discuss the group with friends and relatives and neighbors and colleagues and identify with it.

Clearly, OCA and other Citizen Action affiliates have avoided the gentrification that has narrowly upscaled the agendas of so many other groups.

Ralph Whitehead, Jr.
Amherst, MA

Ralph Whitehead, Jr. teaches at the University of Massachusetts.

The Waiting Game

To the Editors:

Deborah A. Stone presents a cogent review of the limitations of current state reform actions in the health sector ("Why the States Can't Solve the Health Care Crisis," TAP, Spring 1992). If anything, the case is far more bleak than she indicates. States are hampered by ERISA, federal program bureaucracies, fear of raising taxes and of either driving out business or encouraging freeloaders to enter the state.

At every meeting of state legislators or policy officials that I have ever attended, a particular mantra is recited: "Health care is a federal responsibility, but we can't wait for federal actions that will not come for five or ten years. We must do something now." In many cases, states view their responses as mere stopgaps while they wait for the federal government to take more appropriate actions.

In the same issue, John E. McDonough proposes a state single-payer system ("States First: The Other Path to National Health Reform.") But such a system is still an insurance-based strategy, and the need for federal waiver remains.

The only way for states to free themselves of the need for federal approval would be to adopt a non-insurance-based approach to health services delivery. A state tax, independent of ERISA, could finance the provision of universal and comprehensive health services. If the elderly population remained covered by Medicare, there would be no need to obtain any federal waivers for such a system. Moreover, this proposal would not violate ERISA.

Given the difficulties inherent in both raising taxes and reforming health care finance, however, this is not a strategy any state is likely to pursue aggressively.

Howard S. Berliner
New York, N.Y

Howard S. Berliner is associate professor of health services management at the New York School for Social Research.

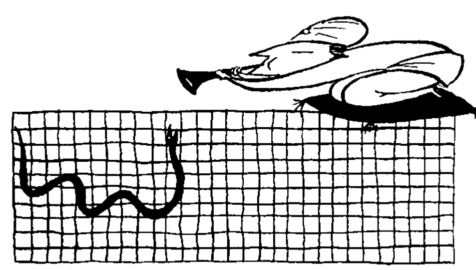
The Right, the Rich, and the Facts
Deconstructing the Income Distribution Debate

Paul R. Krugman

During the mid-1980s, economists became aware that something unexpected was happening to the distribution of income in the United States. After three decades during which the income distribution had remained relatively stable, wages and incomes rapidly became more unequal. Academic researchers soon began arguing vigorously about the causes of the growth in inequality: was it global competition, government policy, changing technology, or some other factor? What nobody, whatever his or her political stripe, questioned was the fact that there had been a dramatic change in income distribution.

During 1992 this genteel academic discussion gave way to a public debate, carried out in the pages of the *New York Times*, the *Wall Street Journal*, and assorted popular magazines. This public debate was remarkable in two ways. First, the conservative side displayed great ferocity in presenting its case and attacking its opponents. Second, conservatives chose to take an odd, and ultimately indefensible, position. They could legitimately have challenged those who have called attention to the growing dispersion of income on the grounds that nothing can, or at any rate should, be done about it. But with only a few exceptions they chose instead to make their stand on the facts—to deny that the massive increase in inequality had happened. Since the facts were not on their side, they were forced into an extraordinary series of attempts at statistical distortion.

The whole episode teaches us two lessons. At one level, it is a sort of textbook demonstration of the uses and abuses of statistics. This article reviews that lesson, tracing out how conservatives tried to distort the record and why they were wrong. But the combination of mendacity and sheer incompetence displayed by the *Wall*



Street Journal, the U.S. Treasury Department, and a number of supposed economic experts demonstrates something else: the extent of the moral and intellectual decline of American conservatism.

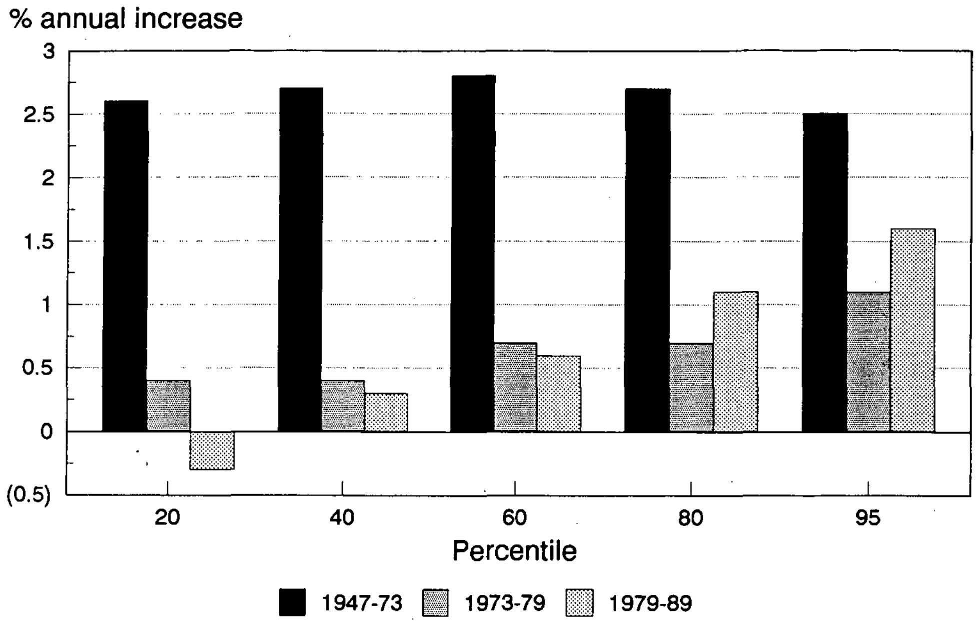
I begin with a review of the basic data, followed by an assessment of the three kinds of conservative attacks on the simple facts about growing inequality: (i) efforts to deny the facts, through a mixture of confused statistical arguments; (ii) claims that the growth record of the Reagan years outweighs or negates any apparent increase in inequality; (iii) claims that income mobility makes comparisons of the income distribution at a point in time meaningless. A final section tries to put some perspective on the whole debate.

Some Basic Facts

There are some non-official sources that provide evidence for growing inequality of

FIGURE 1

Distribution of income gains, 1947-89



income in the United States. For example, *Fortune* has long carried out annual surveys of executive compensation; and since the mid-1970s compensation of top executives has risen far faster than average or typical wages, a process entertainingly discussed by Graef Crystal in his *In Search of Excess*. Surveys carried out by the University of Michigan have also shed useful light on income distribution, in particular on the dynamics of income over time. There is also anecdotal evidence: Tom Wolfe noted the soaring demand for apartments in Manhattan's "Good Buildings" well before academics had started to take the growing concentration of wealth seriously, and indeed his *Bonfire of the Vanities* arguably tells you all you need to know about the subject.

What the Census Shows

Most academic studies on the distribution of income in the United States rely on Census data, compiled from the Current Population Survey. These data have certain limitations, to which I will turn in a moment. But as a starting point, the Census numbers have one great advantage: they are not controversial. In all the mud-slinging of the income distribution debate, nobody has yet accused the Census of bias or distortion (although that may come next).

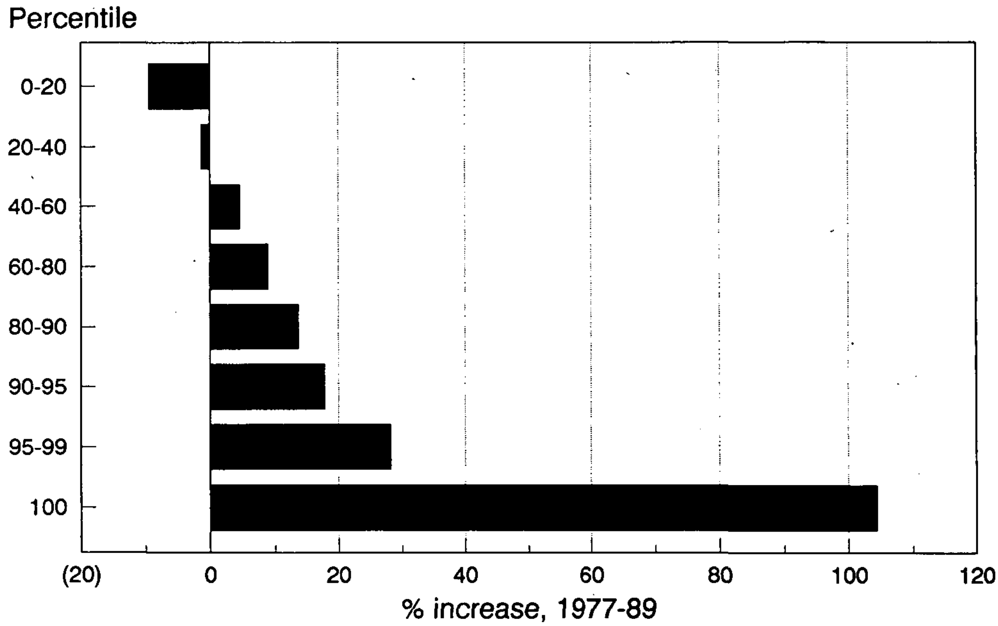
Figure 1 shows a picture that ought to be part of the consciousness of anyone who thinks about trends in the U.S. economy since the 1970s. The figure shows the rate of growth of income at selected points in the income distribution over several different periods.

The income distribution is measured in percentiles. For example, the first set of bars shows the rate of growth of income of the family at the 20th percentile (the top of the bottom quintile). The choice of percentiles ranging from 20 to 95 means excluding the real extremes. Some very important developments are missed by these exclusions, especially at the top. But this picture still gives us a useful baseline.

The three periods chosen are 1947-73, 1973-79, and 1979-89. The first period rep-

FIGURE 2

Increases in income, 1977-89



resents what Alice Rivlin has called the "good years"—the great postwar boom generation. The remaining two periods show the "seventies"—the period from the business cycle peak of 1973 to that of 1979—and the "eighties"—from the 1979 peak to the 1989 peak.

What do we see in the figure? First, the 1947-73 numbers show what real, broad-based prosperity looks like. Over that period incomes of all groups rose at roughly the same rapid clip, more than 2.5 percent annually. Between 1973 and 1979, as the economy was battered by slow productivity growth and oil shocks, income growth became both much slower and more uneven. Finally, a new pattern emerged after 1979: generally slower income growth, but in particular a strong tilt in the growth pattern, with incomes rising much faster at the top end of the distribution than in the middle, and actually declining at the bottom.

In some of the conservative critiques I will describe below, apologists claim that the 1980s represented a normal process, that there was nothing unusual or distressing about the rise in inequality. As the discussion gets a bit complicated, it will be useful to retain the basic image of Figure 1: "good" growth looks like an all-American picket fence; growth in the 1980s looked like a staircase, with the well-off on the top step.

The CBO Numbers

The Census numbers shown in Figure 1 tell a pretty clear story. Nonetheless, it has been apparent for some time that the story is incomplete, because it fails to give a full picture of gains among families with very high incomes.

Census numbers are of little use in studying high-income families, for two reasons, one major, one minor. The main problem is the arcane technical issue of "top-coding." The questionnaires on which the Current Population Survey is based do not ask for precise incomes; instead, families are asked to place their income within a series of categories, of which the highest is "over x," currently $250,000. This means, of

course, that the Census data give no information about changes in the fortunes of families with incomes high enough to be above that top number. The minor problem is that Census data do not count one important source of income for high-income families: capital gains.

It is precisely because Census data are weak when it comes to very high incomes that those who use that data usually look no higher than the 95th percentile; that is, the bottom of the top 5 percent. Over the period 1947-73, when everyone's income went up at about the same rate, the weakness of Census data at the top end didn't matter much. But it became obvious during the 1980s that incomes were rising even faster among the very well off than at the 95th percentile.

One might have guessed this simply from Figure 1: Since the available data show that the higher you go in the income distribution, the bigger the gains, one might reasonably suppose that the same is true for the unavailable data. One might well expect to find that inequality *within* the top 5 percent has risen, implying larger gains at, say, the 99th percentile than at the 95th.

One could also guess that income was growing especially rapidly at the top from less formal evidence. Notably, Graef Crystal's executive compensation numbers suggested a tripling of the compensation of the compensation of CEOs relatively to ordinary workers, and virtually every social observer has noted an apparent explosion of affluence at the top. All that was lacking was hard statistical evidence.

Work by the Congressional Budget Office fills the gap. The CBO is charged by the House Ways and Means Committee with estimating changes in the incidence of federal taxation, to provide the supporting appendices for that committee's mammoth annual publication, the *Green Book.* To do this, the CBO has developed a model that pools Census and IRS data. This model allows the CBO to bypass the problem of top-coding, and also allows incorporation of taxable capital gains.

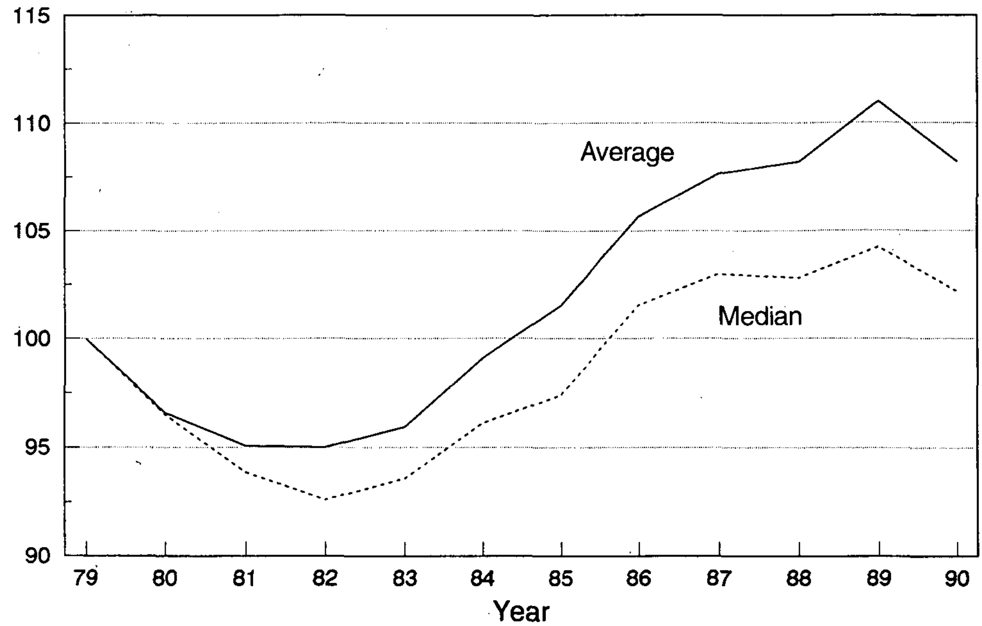
Figure 2 shows the CBO estimates for the gains in income at different parts of the income distribution over the period 1977-1989. (Ideally, we would use 1979-89. Unfortunately, for reasons having to do with its original mandate to focus on tax incidence, the CBO did not do an estimate for 1979.) Here, the data are presented a little differently from those in Figure 1. We are shown changes in, say, average income for families in the bottom quintile, rather than for the individual family at the top of that quintile, and the numbers show the percentage change over the period as a whole, rather than annual rates of change. But the picture is clear: there were truly huge income gains at the very top. In particular, the top 1 percent of families saw their incomes roughly double over a twelve-year period. That's a 6 percent rate of growth, which means that for the very well-off the 1980s really were a very good decade—not only compared with the slow growth lower down in the distribution, but even compared with the postwar boom years.

There is one other important point to be learned from the CBO numbers: how well-off the well-off actually are. The usual story still told by conservatives is that the so-called "rich" are not really all that rich. Conservatives often point out that, according to Census numbers, in 1989 it required an income of only $59,550 to put a family in the top quintile, an income of only $98,963 to put it in the top 5 percent. The implication is that we are essentially a middle-class society, with only an insignificant handful of people rich enough to excite any concern about ill-gotten gains.

But the CBO numbers paint a different picture, because they let us look higher up the scale. According to the CBO, to be classified in the top 1 percent a family of four needed a pre-tax income (in 1993 dollars) of at least $330,000. The *average* income of four-person families in the top 1 percent was about $800,000. We are no longer talking about the middle class.

FIGURE 3

Average vs. median income, 1979=100



The "Krugman Calculation"

It is a remarkable fact that incomes have soared so much at the top of the U.S. income distribution. But is it important? Until recently, most economists thought not; growing poverty might be an important social issue, but the fact that some people are very rich was only a social curiosity.

My own contribution to this discussion was to point out that there is a sense in which the rise in incomes at the top is in fact a major economic issue, and to offer a shorthand way of conveying that point: the now infamous "Krugman calculation" that 70 percent of the rise in average family income has gone to the top 1 percent of families.

Let's begin by recalling that typical incomes grew very slowly during the 1980s. For example, even if one uses a revised consumer price index that shows lower inflation than the standard index, one finds that median family income—the income of the family at the midpoint of the income distribution—in 1989 was only 4.2 percent higher than in 1979. That is, median family income rose at only about a 0.4 percent annual rate. And many measures of real wages for typical workers show a decline during the 1980s.

Now one would have expected incomes in the U.S. to grow more slowly than in the good years before 1973, because of the productivity slowdown. Productivity growth in the U.S. economy fell from about 3 percent annually during the postwar boom to about 1 percent annually after 1973; and ordinarily productivity growth determines real income growth.

But although productivity growth is slow, it is not negligible. We are a substantially more productive country now than we were in 1979. So why isn't the typical family significantly better off? Where did the productivity growth go?

The proximate answer is that *average* incomes went up relative to the *median* income. Figure 3 shows average versus

median family income from 1979 to 1990. It turns out that from 1979 to 1989, average family income rose 11 percent, just about exactly what one would have expected given 1 percent productivity growth. So there is no problem with the accounting.

The rise in average income relative to median should not be a surprise, given Figures 1 and 2. That is exactly what one would expect to see when incomes become more unequal, because when incomes at the top of the scale are rising faster than the average, incomes farther down must correspondingly grow less rapidly than the average. *In an arithmetic sense,* we can say that most of the growth in productivity was "siphoned off" to high-income brackets, leaving little room for income growth lower down. I emphasize that this is only an arithmetic point: it says nothing about the economic forces at work, in particular whether something else could or should have happened.

When I say that growth was "siphoned off" to high-income families, however, who am I talking about? Are we talking about two married schoolteachers, whose $65,000 income is enough to put them into the top quintile? Or are we talking about Donald Trump?

Figure 2 ought to suggest to you that we are *not* talking about those schoolteachers: the really big income gains were not near the bottom of the top quintile, but at its top. Indeed, according to the CBO's numbers the share of after-tax income going to the ninth decile—families between the 81st and 90th percentiles—actually fell slightly between 1977 and 1989. So all of the siphoning went to families in the top 5 or 10 percent. And given Figure 2, one might well suspect that the bulk went to the top 1 percent.

To get a sense of this — and, to be honest, to help attract attention to a trend that I thought had been neglected—I proposed the following thought experiment. Imagine two villages, each composed of 100 families representing the percentiles of the family income distribution in a given year—in particular, a 1977 village and a 1989 village. According to the CBO numbers, the total income of the 1989 village is about 10 percent higher than that of the 1977 village; but it is not true that the whole distribution is shifted up by 10 percent. Instead, the richest family in the 1989 village has twice the income of its counterpart in the 1977 village, while the bottom forty 1989 families actually have lower incomes than their 1977 counterparts.

Now ask: how much of the difference in the incomes of the two villages is accounted for by the difference in the incomes of the richest family? Equivalently, how much of the rise in average American family income went to the top 1 percent of families? By looking at this measure we get a sense of who was "siphoning off" the growth in average incomes, accounting for the fact that median income went up so little.

The answer is quite startling: 70 percent of the rise in average family income went to the top 1 percent.

What does this tell us? Since the 1970s median income has failed to keep up with average income—or, to put it differently, the typical American family has seen little gain in spite of rising productivity. So when we speak of "high income" families, we mean *really* high income: not garden-variety yuppies, but Tom Wolfe's Masters of the Universe.

Wealth distribution. Wealth—the assets that families own—and income are different though related things. Wealth is typically much more concentrated than income: current estimates are that the 1 percent of families with the highest incomes receive about 12 percent of overall pretax income, while the wealthiest 1 percent of families has some 37 percent of net worth. Precisely because wealth is so concentrated, it is difficult to measure accurately from sample surveys: a random survey of a few hundred or even a few thousand people will contain only a handful of really wealthy people. Nonetheless, researchers at the Federal Reserve Board have tried to use sophisticated sampling procedures to deal with this problem. For some time their surveys have shown

that average wealth was rising much faster than median—as in the case of income distribution, a sure sign of growing inequality. In March, 1992 they released a working paper that showed a sharp increase in the concentration of wealth even since 1983, with the share of the top 1 percent of families rising from 31 to 37 percent.

Recently, several academic researchers (Claudia Goldin and Brad DeLong of Harvard, together with Edward Wolff of New York University) have put together long-range historical estimates on wealth distribution. They suggest that the concentration of wealth in the U.S. reached a trough in the late 1970s at a level not seen since the nineteenth century, then surged rapidly back to 1920s levels. The point is that the wealth numbers confirm the general picture of a dramatic and rapid increase in economic inequality in the U.S.

Political Implications

Rising inequality need not have any policy implications. Even if you would prefer to have a flatter distribution, other things equal (and not everyone even shares that goal) what should we do about it? Few people in America would currently support a policy of wage and salary controls (although Claudia Goldin has noted that World War II wage controls seem to have produced a long-term narrowing of wage differentials). One might use growing inequality as an argument for restoring some of the progressivity of the tax system; but most of the growth in inequality has come from changes in pre-tax income, not from regressive tax policies. An honest conservative like Herbert Stein is willing to say "Yes, inequality has increased, but I don't think that calls for any policy response."

Nonetheless, many conservatives were furious when the income distribution story surfaced in early 1992. Above all, the story made the editors of the *Wall Street Journal* and the Bush administration see red.

The reason was pretty clear. Supply-siders like Robert Bartley, the *Journal*'s editorial page editor, believe that their ideology has been justified by what they perceive as the huge economic successes of the Reagan years. The suggestion that these years were not very successful for most people, that most of the gains went to a few well-off families, is a political body blow. And indeed the belated attention to inequality during the spring of 1992 clearly helped the Clinton campaign find a new focus and a new target for public anger: instead of blaming their woes on welfare queens in their Cadillacs, middle-class voters could be urged to blame government policies that favored the wealthy.

So the dismay and anger of conservatives was understandable. The response from the administration, the *Journal*, and other conservative voices was, however, inexcusable: instead of facing up to the fact of rapidly growing inequality under conservative rule, they tried to deny the facts and shoot the messengers.

The Conservative Response 1: Denial

The Number of Families. When the *New York Times* published a story reporting my estimates on the impact of rising inequality, the initial response of a number of conservative economists (including staffers at the Council of Economic Advisers) was to do a different calculation: to ask what share of the growth in *total* rather than *average* income went to the top 1 percent. Let's call it the "CEA calculation." This is a very different number, because the number of families in the U.S. grew substantially between 1977 and 1989, as the last of the baby boomers grew up. So total income went up, not by 10 percent, but by about 35 percent. Naturally, the share of this much larger rise that accrued to the richest was a good deal smaller, 25 versus 70 percent. This revised number was widely circulated in Washington as a refutation of the number published in the *New York Times*; indeed, I have been told that one major news magazine almost ran a gleeful story on the *Times*'s blunder, but at the last minute was warned that I was right and the CEA was wrong.

What's wrong with the CEA calculation?

Remember the questions we are trying to answer: why didn't the typical American family see much increase in income even though productivity rose substantially, and who was reaping the benefits of rising productivity? If you think about it for a minute, you'll see that using income growth numbers that include sheer growth in working-age population gets us completely away from those questions. Consider, for example, what happened to the bottom 20 percent of the income distribution. Average income among these families fell 10 percent over the CBO period—but their numbers went up about 25 percent, and their total income therefore rose about 15 percent. So the CEA calculation has the bottom quintile sharing in economic growth, even though average family income in that group went down!

The CEA also distributed a memo presenting a hypothetical numerical example, too complicated to reproduce here. Its point was that if the labor force were to receive a large influx of inexperienced workers, the experience of the median worker might decline; in that case, stagnation in median income might mask rising wages for a worker with any given degree of experience, and a "Krugman calculation" would erroneously suggest that only the very well-off had gained. The memo was right in principle. As anyone who has looked at labor force and wage data knows, however, the real facts look nothing like the contrived example: the growing inequality of wages represents increased dispersion in wages for workers with given characteristics, not a change in the mix.

The Size of Families. The next issue fits awkwardly into this scheme, since it involves an honest difference of opinion between myself and the CBO, and does not in the end make much difference. This is the question of how, if at all, to deal with the declining size of families in the U.S.

As noted above, the CBO likes to measure, not raw family income, but "adjusted" family income (AFI), measured in multiples of the poverty line. Adjusted family income has been rising faster than income itself, because families have been getting smaller. From 1977 to 1989, AFI grew by 15 percent compared with 10 percent for the raw number.

When you do a Krugman calculation using AFI instead of raw income, the result looks a little bit less extreme: the top 1 percent get 44 instead of 70 percent of the increase. This is still pretty impressive; but is the correction appropriate?

The CBO likes to use adjusted family income because they view it as a better measure of the material standard of living: a family with one child will be able to afford things that a family with three children and the same income cannot. Fair enough. But it seems to be stretching the usefulness of the concept when the decision of U.S. families to have fewer children is considered to be a form of income growth (what would the Republican platform committee say?).

Indeed, the number of hours worked by the typical American family actually rose during the 1980s. So if we are asking why family incomes didn't rise along with productivity, we should if anything be discounting the slight rise in income for the fact that families were working harder to get it. The CBO's adjustment goes in the opposite direction. Or to put it another way: the adjusted family income measure helps explain why so many families are able to afford VCRs, but misses the reason why they feel worse off than their parents.

All this is relatively minor, however. With or without the family size adjustment, the data confirm a radical shift of income to the top 1 percent.

Capital Gains. Many conservative commentators—including Paul Craig Roberts, Alan Reynolds, Representative Richard Armey, and the editorial page of the *Wall Street Journal*—have bitterly attacked the CBO for including capital gains in its estimates of income. They charge that this inclusion overstates the income of the rich in several ways: it includes one-time sales as if they were persistent income; it counts

capital gains on assets held by the rich, but ignores the non-taxable gains of middle-class families on their houses; it counts as income the inflation component of capital gains. And all of these commentators have claimed that the CBO's capital gains estimates are the basis of the conclusion that the rich have done better than you or me.

There are answers to each of these criticisms: asset sales must take place sometime; capital gains on houses are much smaller than the critics imagine; the inflation component has fallen with the rate of inflation, so that if anything the rate of growth of income at the top is understated. The main point, however, is that excluding capital gains from the CBO numbers makes very little difference. With capital gains included, the CBO shows the share of income accruing to the top 1 percent rising from 7 to 12 percent between 1977 and 1989, and shows this group receiving 44 percent of the rise in adjusted family income. Without capital gains, the shift is from 6 to 10 percent, and the share of the rise is 38 percent. Although the CBO does not report this, we can guess that a "Krugman calculation" excluding capital gains would still yield a number in excess of 60 percent. In other words, the capital gains issue is a complete red herring.

Can You Be Too Rich? When the Federal Reserve wealth study came out, it was immediately attacked by Alan Reynolds in the *Wall Street Journal*, as well as by Republican Congressman Richard Armey. Reynolds's main argument was that the study, based on a survey of 3,000 families, could not be reliable about the top 1 percent, since thirty families is too small a sample. This was an interesting reaction, since the Fed study carefully explains that they used a two-stage procedure and that their estimates were based on over 400 families in the top 1 percent. In fact, the study is written in the form of a working paper on statistical methodology, and the issue of sample size is raised immediately. One can only conclude that Reynolds did not bother to read the study before attacking it.

Rep. Armey, whose results were reported by Reynolds and Paul Craig Roberts in several columns, took a different tack. By careful search through a previous Fed study, he found what he took to be a significant fact: the average wealth of families with incomes above $50,000 rose more slowly over the period 1983-89 than overall average wealth. He claimed that this fact showed that wealth distribution had actually become more, not less equal. He apparently failed to notice that the size of the "over $50,000" group had increased over the period, from 17 to 20 percent of the population. Suppose that I told you that the average SAT scores of the top 20 percent of students today are lower than those of the top 17 percent a few years ago. Would you worry, or would you simply point out that the extra students I added to the sample obviously dragged down the average?

The wealth dispute was a minor part of the distribution controversy, but it was revealing about the desperation, unscrupulousness, and sheer lack of competence of today's conservatives.

The Conservative Response 2: Taking Credit For Growth

The second line of conservative defense has become a familiar one: they claim that the growth record of the Reagan years shows that supply-side policies produce gains for everyone, and that it is destructive to worry about or even to notice the distribution of income.

Look again at Figure 3. It is clear that from the recession year of 1982 to the business cycle peak in 1989, median income rose substantially (12.5 percent, versus 16.8 percent for average income). If you use these years as the basis of comparison, the lag of median behind average income doesn't look very important. The question is whether these are really the right years to compare.

If there is one really solid contribution of macroeconomic theory to human knowledge, it is the distinction between the business cycle and long-term growth. Long-

term growth is achieved by expanding the economy's productive capacity; recessions and recoveries represent fluctuations in the degree to which that capacity is being utilized. It is a bad thing to be in a recession, and a good thing to recover, but one should never confuse the rapid growth that takes place during a recovery with an improvement in the economy's long-term performance: once the economy is near capacity, growth is bound to slow down. Moreover, recessions and recoveries depend far more on the Federal Reserve than on the administration in power, and happen to Republicans and Democrats alike. That is why a sensible assessment of economic trends involves comparing business cycle peaks or, even better, asking what has happened to the level of income associated with any given unemployment rate.

It is therefore ironic that supply-side ideologues, who originally crusaded against the traditional Keynesian focus on the business cycle, now rest their claims for success entirely on the business cycle recovery from 1982 to 1989. But of course they must, for their program failed to produce any acceleration in long-term growth.

The rise in median income from 1982 to 1989, Robert Bartley's "seven fat years," represented almost entirely a transitory business cycle recovery, which reached its inevitable limit at a level only 4 percent above the 1979 peak. And the subsequent recession, which is no more George Bush's fault than the 1980 slump was Jimmy Carter's, has probably dropped median income back to within less than 4 percent above the 1980 level.

The basic proposition that the "Krugman calculation" was meant to convey is that income inequality has been increasing so rapidly that most families have failed to get much benefit out of *long-term* growth. This proposition stands. One need not take seriously the efforts by supply-siders to chop the past fifteen years into little slices, and claim the good ones while disclaiming the bad ones.

The Conservative Response 3: Income Mobility

America is not a static society. People who have high incomes one year may have lower incomes the next, and vice versa. In the two hypothetical villages that I described earlier, one would not necessarily suppose that the same people (or their children) occupied the same positions in 1977 and 1989. And economic welfare depends more on the average income you earn over a long period than on your income in any given year. So there are some risks in drawing too many conclusions about the distribution of economic welfare from statistics on the distribution of income in any one year.

There are two ways in which income mobility—the shuffling of the economic deck that takes place as families move up or down the income ranking—could offset the proposition that inequality has increased sharply. First, if income mobility were very high, the degree of inequality in any given year would be unimportant, because the distribution of lifetime income would be very even. I think of this as the blender model: whatever the current position of the bubbles in your Mixmaster, over the course of a few minutes each bubble will on average be halfway up.

Second, if income mobility had increased over time, this could offset the increased inequality at each point in time. An increase in income mobility tends to make the distribution of lifetime income more equal, since those who are rich have nowhere to go but down, while those who are poor have nowhere to go but up.

Unfortunately, neither of these possibilities actually characterizes the U.S. economy. There is considerable income mobility in the U.S., but by no means enough to make the distribution of income irrelevant. For example, Census data show that 81.6 percent of those families who were in the bottom quintile of the income distribution in 1985 were still in that bottom quintile the next year; for the top quintile the frac-

Percentages of families making transitions from:

	Before 1980	After 1980
Middle income to low income	8.5	9.8
Middle income to high income	5.8	6.8
Low income to middle income	35.1	24.6
High income to middle income	30.8	27.6

tion was 76.3 percent. Over longer time periods, there is more mixing, but still not that much. Studies by the Urban Institute and the U.S. Treasury have both found that about half of the families who start in either the top or the bottom quintile of the income distribution are still there after a decade, and that only 3 to 6 percent rise from bottom to top or fall from top to bottom.

Even this overstates income mobility, since (i) those who slip out of the top quintile (say) are typically at the bottom of that category, and (ii) much of the movement up and down represents fluctuations around a fairly fixed long-term distribution. Joel Slemrod of the University of Michigan has provided a useful indicator that suggests how persistent high incomes tend to be: the average income of families whose income exceeded $100,000 in 1983 was $176,000 in that year; their average income over the seven-year period ending in 1985 was $153,000.

Nor is there any indication that income mobility increased significantly during the 1980s. Table 1 shows some evidence from a study by Greg Duncan of the University of Michigan on transitions over a five-year period into and out of a somewhat arbitrary but reasonable definition of the "middle class". This middle-class category shrank in the 1980s, so that middle-class families became more likely both to rise and to fall; but correspondingly fewer poor families moved up or rich families down into the middle class. (Vanishingly few poor families became rich or vice versa). The overall picture suggests little change in mobility.

Income mobility might in principle be an important offset to the growth in inequality, but in practice it turns out that it isn't. That did not stop conservatives from trying to use it as a debating point.

The Hubbard Study

In June the Treasury's Office of Tax Analysis, under the direction of Glen Hubbard, an economist on leave from Columbia, released a report claiming that there is actually huge upward mobility in the U.S. In particular, it claimed that 86 percent of individuals who started in the bottom quintile in 1979 had moved out by 1988, and indeed that an individual who started in the bottom quintile was more likely to end up in the top quintile than to stay where he was.

But this report was based on what we may charitably call a strange procedure. Here's what Hubbard's report did: it tracked a group of individuals who paid income taxes in all ten years from 1979 to 1988, and compared their incomes not with each other but with those of the population at large. The restriction to individuals who paid taxes in all years immediately introduced a strong bias toward including only the economically successful; only about half of families paid income taxes in all ten years. This bias toward the successful was apparent in the fact that by the end of the sample period the group contained very few poor people and a lot of affluent ones: indeed, only 7 percent of the sample were in the bottom quintile by the sample's end, while 28 percent were in the top quintile. More important, by comparing the sample with the population at large rather than with each other, the report essentially treated the normal tendency of earnings to rise with age as representing social mobility. The median age of those whom the study

classified as being in the bottom quintile in 1979 was only twenty-two.

Kevin Murphy, a labor economist at the University of Chicago, neatly summed up what the Treasury study had found: "This isn't your classic income mobility. This is the guy who works in the college bookstore and has a real job by his early thirties."

Income Gains

We have finally come to the last, and perhaps most effectively confusing, conservative argument.

Let's give the fact first: families who start out with high income on average have low or negative income growth over the next decade, while families who start out with low income on average see their incomes rise rapidly. This is true in both the Urban Institute and the Treasury data. In the Urban Institute's numbers, families in the bottom quintile in 1977 saw their income rise 77 percent by 1986, while families in the top quintile saw their income rise only 5 percent. The editorial page of the *Wall Street Journal*, Paul Craig Roberts, and others have seized upon this kind of number as evidence that the poor actually did better than the rich in the 1980s. Let me call this the "*WSJ* calculation."

The *WSJ* calculation seems striking; but on reflection it is completely consistent with the conclusion that the U.S. has rapidly growing inequality. It shows only that there is indeed some income mobility—but nobody denied that. And it is no more a sign that supply-side policies helped the poor than the fact that very few people win the lottery several years in a row.

Unfortunately, it is hard to explain this without a numerical example: Imagine an economy in which in any given year half of the families earn $100,000 and the other half earn $200,000. And imagine also that this economy fits the blender model, so that a family that starts in the bottom half has a 50 percent chance of being in the top half ten years later, and conversely.

Now do the *WSJ* calculation. Families that start in the bottom half begin with $100,000; ten years later, on average they have $150,000, so they gain 50 percent. Families that start in the top half begin with $200,000; ten years later, on average they also have $150,000, so they *lose* 33 percent.

But has the distribution of income gotten more equal? No: it is unchanged. All that we see is the familiar statistical phenomenon of "regression toward the mean." Essentially, the initially rich have nowhere to go but down, the initially poor nowhere to go but up. So if the income distribution were stable, any income mobility would inevitably produce the *WSJ* result; and it is not surprising that we still get it even when income inequality is rising.

If income mobility were as high as in this example, of course, the income distribution at a point in time wouldn't matter very much. But as we have already seen, income mobility isn't that high: most poor or rich people stay that way. So we have enough income mobility to make the *WSJ* calculation seem right, but not enough to change the real story that inequality is rising.

If you want a more concrete image, think of it this way. In any given year, some of the people with low incomes are just having a bad year. They are workers on temporary layoff, small businessmen taking writeoffs, farmers hit by bad weather. These people will be doing much better in a few years, so that the average income of people who are currently low-income will rise a lot looking forward. But that does not mean that people who are *persistently* poor have rising incomes; they don't. Perhaps the most revealing way to show what is wrong with the WSJ calculation is to do it in reverse, as Isabel Sawhill of the Urban Institute did. In her data, families who were in the top quintile in 1977 had experienced an 11 percent fall in income by 1986. But when she instead looked at families who were in the top quintile *in 1986*, she found that they had experienced a 65 percent gain! Conservatives like to emphasize income mobility, because they can evoke the historical image of America as a land of opportunity, an image that has always been partially if not com-

pletely true. But when all is said and done, mobility in the 1980s was neither increasing, nor high enough to make any difference to the overwhelming picture of growing inequality.

The growth in income inequality in the United States since the 1970s is hardly an inconspicuous part of the economic landscape. On the contrary, it is apparent in virtually every economic statistic, and colors nearly everything about our national life. You may accept this trend or deplore it, but one might have thought that nobody could seriously deny it.

The surprise lesson of the income distribution controversy, then, is what it says about today's conservative mind-set. It turns out that many conservatives, for all their anti-totalitarian rhetoric, have Orwellian instincts: if the record doesn't say what you wish it did, hide it or fudge it.

There are substantive issues about income distribution. Nobody really knows all the reasons why incomes at the top have soared while those at the bottom have plunged. Still less is there a consensus about what kinds of policies might limit or reverse the trend. But it seems that many conservatives not only don't want to discuss substance: they prefer not to face reality, and to live in a fantasy world in which the 1980s turned out the way they were supposed to, not the way they did.❖

The Inequality Controversy: Some Recent Artifacts

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- "Estimation of Household Net Worth Using Model-based and Design-based Weights: Evidence from the 1989 Survey of Consumer Finances," by A. Kennickell and R.L. Woodburn, Board of Governors, Federal Reserve System, April 1992.
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- "Is Income Inequality Really Growing? Sorting Out the Fairness Question," by I. Sawhill and M. Condon, The Urban Institute, June 1992.
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THE AMERICAN PROSPECT

Can We Put a Time Limit on Welfare?

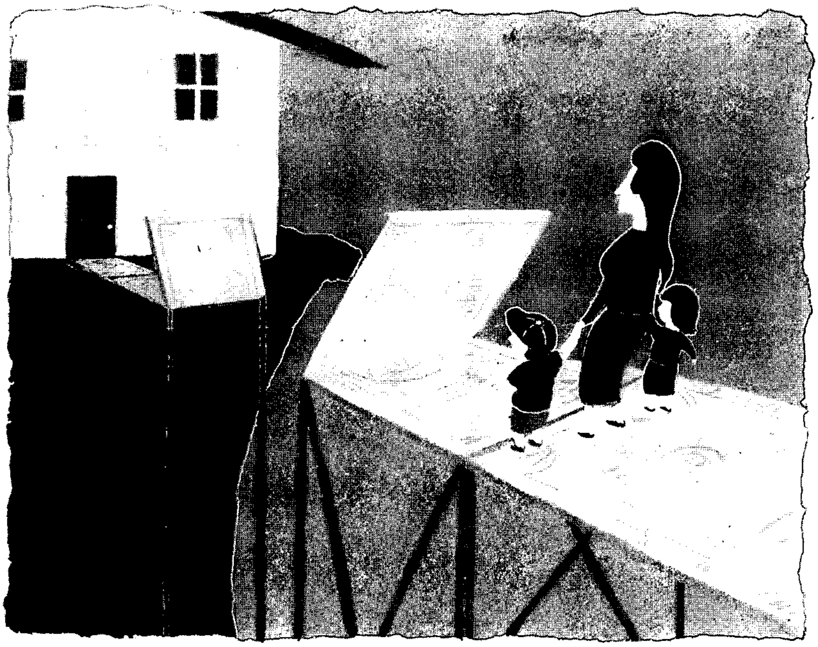
Christopher Jencks

The first results are just beginning to trickle in from Washington's last venture in welfare reform, the Family Support Act of 1988, which sought to cut the welfare rolls by collecting more child support from absent fathers and giving single mothers more job training. Not surprisingly, evaluators are finding that modest expenditures on job training yield modest increases in welfare recipients' potential earnings. Faced with such unexciting news, and mindful of its many previous unsuccessful efforts to make America's welfare system more acceptable to the public, Congress now shows little enthusiasm for new legislation in this area.

Nonetheless, grass-roots hostility to the system has been driving both state legislators and presidential candidates to propose more drastic changes. Many states have trimmed benefits for parents receiving Aid to Families with Dependent Children (AFDC), for childless adults receiving General Assistance (GA), or both. Michigan has abolished GA altogether. New Jersey has decided not to increase AFDC recipients' benefits if they have another child while on welfare, and Wisconsin has moved in the same direction. Many other states have been considering changes in AFDC rules that they hope will encourage young women to stay in school, postpone motherhood, or get married. But by far the biggest proposed change is Bill Clinton's suggestion that no one be allowed to collect AFDC for more than two years.

If this proposal does nothing else, it should at least give pause to those who see Clinton as a middle-of-the-road Democrat committed to the status quo. A two-year time limit would be the biggest change in AFDC since Congress established the program in 1935. The average recipient now stays on the rolls 6.6 years. A two-year limit would, therefore, cut the number of recipients by more than 70 percent. At the peak of the last business cycle in 1989, something like 3.8 million families were collecting AFDC. With a two-year time limit, the figure would have been about 1.1 million.

A time limit on AFDC would also largely solve the problem that most worries conservatives these days, namely that AFDC makes recipients "dependent." So far as I know, there is no evidence that this is a real problem. Almost all mothers depend on someone for money: their husband, their employer, their parents, their boyfriend, or the government. All are in some sense "dependent" as a result. But it is far from obvious that depending on the government has significantly worse psychological effects than depending on anyone else. The elderly certainly don't complain about it much. It is true that welfare recipients are



more likely than most people to be depressed, passive, and irresponsible. But that does not mean AFDC caused their problems. Many had such problems the first day they walked into a welfare office. Depression, passivity, and irresponsibility make it hard to find either a job or a husband. Without one or the other, a mother is pretty much stuck on welfare. Nonetheless, the doctrine that collecting welfare is bad for the recipients is so widely accepted that we have to accept it as a political fact, regardless of whether it is true.

Until now, conservatives who wanted to minimize welfare dependency have tried to keep benefits as low as possible and make collecting them as onerous and humiliating as possible. Clinton's proposal, which he borrowed from David Ellwood, a welfare expert at Harvard's Kennedy School of Government, would achieve this goal in a far more humane way, by putting a time limit on "dependency." If AFDC became a short-term program designed to help women who had just become single mothers achieve self-sufficiency, it might even be possible to set benefits at a realistic level, allowing recipients to support their families without having to cheat.

But what happens at the end of two years? It is tempting to pretend that if we just invested adequate resources, two years of intensive education and job training could make every single mother economically self-sufficient. But while that will surely be true for some, it will never be true for all. Unless we want another round of welfare "reform" that fails, we need to be realistic about the options open to us.

Contrary to what many liberals claim, the big obstacle to making single mothers economically self-sufficient is seldom the shortage of jobs. During recessions, of course, jobs are hard to find. But when the economy is healthy, minimum-wage jobs are relatively easy to find. The problem is that a minimum-wage job will not make a single mother economically self-sufficient.

There is endless controversy about how much money single mothers need to make ends meet. Conservative legislators and absent fathers seem to imagine that these families can live on air. Liberals have been somewhat more realistic, but not much. In large part this is because we take official income statistics too literally.

In 1990, for example, the official poverty line for a family of three was just over $10,000. Yet when the Census Bureau interviewed the heads of three-person families, one out of every ten reported an income below $10,000. Most observers, both liberal and conservative, conclude from this that families can survive on a sub-poverty budget. That conclusion is probably wrong. If we had accurate measures of what these families consumed, I believe we would find that very few got by with goods and services worth less than $10,000. The idea that millions of families somehow survive on minuscule budgets is, I believe, largely a product of poor measurement, not widespread frugality.

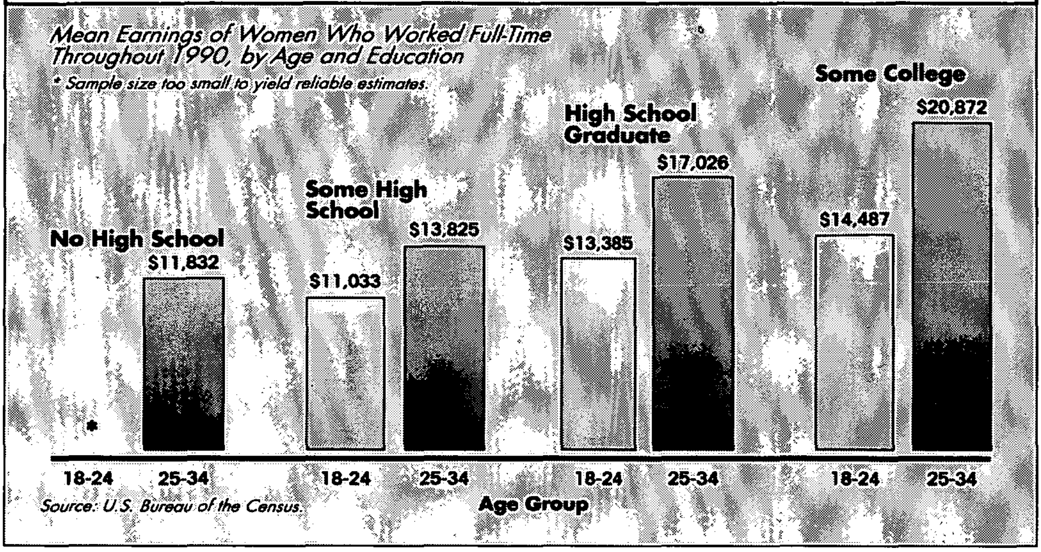
If you look at the Census Bureau's income data carefully, you find that nearly half the families of three with incomes below $10,000 in 1990 actually reported incomes of less than $5,000. Some reported no income at all, and some reported net losses (from a family business). Clearly these families were not living on their reported income alone. Some were living off savings. Some were only temporarily poor and were borrowing against future income. Some were not reporting off-the-books income. Some were single mothers whose budget deficit was being made up by a live-in boyfriend whose presence the mother probably did not report and whose income the Census Bureau would not have counted anyway, because he was not part of the mother's family.

Nonetheless, a lot of three-person families undoubtedly spent less than $10,000 in 1990. But when you look at the way such families live, you almost always find that they are also consuming quite a lot of things for which they do not pay cash. Some get free food stamps, housing subsidies, and medical care from the government. Some get free housing because they work as janitors, caretakers, or tenant farmers, or because they live with relatives. Some ride to work with a friend, or get free child care from a relative. No survey provides a full accounting of what poor families consume, but it seems highly unlikely that a family of three could consume less than $5,000 worth of goods and services over the course of a year. Most surely consume more than $10,000 worth.

Kathryn Edin's interviews with Chicago welfare mothers during 1989 and 1990 (see Christopher Jencks and Kathryn Edin, "The Real Welfare Problem," *TAP*, No. 1, Spring 1990) confirm this judgment. She found that while the typical mother got less than $5,000 a year in cash from AFDC, all supplemented their checks in various ways. Even if we ignore the cost of their free medical care, almost all were consuming goods and services worth at least $10,000 a year, and the average was around $12,000. Even at this level of consumption many families were desperately poor. Some had to skip meals or settle for rice and beans near the end of the month. Others had no heat in the winter or no telephone. If these mothers had been working regularly, their expenses would have been even higher, because they would have needed more and better clothes, more transportation, and more child care. When Edin went looking for single mothers who supported themselves entirely by working, she found few who spent less than $15,000. More recent work shows that the figure is even higher in Boston and only slightly lower in Charleston, South Carolina.

In order to earn $15,000, a woman who works forty hours a week must earn at least $7.50 an hour. The minimum wage is currently $4.25 an hour, and while many liberals want to raise it, there is no serious support for pushing it above $5 an hour. If you work regularly at $5-an-hour, you can earn about $10,000 a year before taxes and deductions. But most $5 an hour jobs involve a lot of layoffs and short weeks, so even if an unskilled single mother is trying to work regularly, she cannot count on doing so. We therefore have to assume that many welfare mothers will earn no more than $8,000 or $9,000 in a good year, and even less during recessions.

How Much Can Mothers Earn?



Census data confirm that few welfare mothers are likely to earn $15,000 a year in the labor market. Most are under the age of thirty-five, and only a few have attended college. The chart above shows what women with these characteristics typically earned if they worked full-time throughout 1990. High school graduates over the age of twenty-five averaged $17,000 a year, but nearly half earned less than $15,000. High school dropouts did far worse, as did younger women. Even these averages overestimate welfare mothers' potential earnings, because they cover a relatively select group of women—those who were both willing and able to work full-time throughout the year. The women who were collecting welfare during 1990 would surely earn less than those who worked throughout the year, even if they had the same amount of schooling and were the same age.

If AFDC recipients all spent two years getting additional education and training, their potential earnings would rise, but here again we need to be realistic. The chart shows that high school graduates earned 20 to 25 percent more than high school dropouts in 1990, and women with some college eventually earned 20 to 25 percent more than high school graduates. But it does not follow that two years of training could boost AFDC recipients' potential earnings by 20 to 25 percent.

First, even two years of formal education have less impact than the chart implies, because women who get more education have other advantages as well. High school graduates come from more advantaged families than do dropouts, they are better at reading, math, and other subjects when they enter high school, and they are less likely to have been in trouble with the school authorities or the police. The same logic applies when we compare students who attended college for a couple of years to those who merely finished high school. While there is no consensus on how much of the apparent effect of schooling is due to this kind of selection, most estimates suggest that the figure is between a fifth and two-fifths.

A second reason why we cannot expect two years of training to boost AFDC recipients' earnings as much as two years of high school or college boosts others' earnings is that single mothers are not in a position to give as much time to their studies as the average high school or college student gives. Realistically, therefore, we should probably not expect two years of training to raise welfare recipients' earning power by

more than 10 or 15 percent.

If the Clinton proposal is to be implemented, then, we need to find a way of closing the gap between what single mothers can earn and what they need to support their families. Otherwise we will end up with hundreds of thousands of homeless families instead of the tens of thousands we have now. Even worse, we will end up with more abandoned children, recreating the very problem we invented AFDC to solve in the 1930s. To avoid all this, we will have to provide single mothers who work in minimum-wage jobs with free medical care and at least $5,000 worth of other resources every year to supplement their wages. In years when the labor market is slack the figure will have to be even higher.

The Income Gap

Ideally, absent fathers should come up with this money. Even if the cost of pursuing absent fathers exceeds the amount collected—which will certainly be so for "hard" cases—harassing them will make other men more cautious about fathering children they cannot support. Until the 1960s a lot of young men used condoms because they knew that an unplanned pregnancy meant a shotgun marriage. Now that parents no longer pressure expectant couples to marry, we need some other way of encouraging men to use birth control. If they know that having a child out of wedlock will either cost them a lot of money or lead to a lot of grief when they cannot pay, condom sales should edge upward.

But the absent fathers of today's welfare mothers do not have anything like enough money to fill the entire gap between what single mothers can earn and what they need to support their children. If a mother of two is earning $9,000 a year and has no other help, an absent father would typically have to come up with at least $6,000 for her to balance her budget, even if she got free medical care. Child support orders typically require absent fathers to pay about 25 percent of their income. That means the father must earn at least $24,000 a year before his payments reach the required level.

Men with children who get AFDC are mostly young and poorly educated. In addition, many are black, and race affects men's earnings far more than it does women's. As the table on page 37 indicates, a large minority of these men did not work at all during 1990, and the percentage would be even higher if the table included men who were in jail, in mental hospitals, homeless, or missed by Census Bureau surveys.

The table also shows the mean earnings of the groups most likely to have fathered the children who are currently on welfare. In 1990 no group of twenty-five to thirty-four year-olds without some higher education averaged as much as $24,000. The best available data suggest that the typical absent father of a child on welfare would only have been expected to pay about $2,000 as of 1987. This would not be trivial, but it still leaves a $4,000 gap between what welfare mothers might get from work plus child support and what they need to pay their bills.

When single mothers with low-wage jobs do not have enough money to pay their bills, some can move in with their parents, other relatives, or friends. While these arrangements may well be quite good for children, sharing space tends to create a lot of conflict among adults. As a result, only a minority seem able to sustain such relationships over the long run. Instead, many single mothers with budget deficits end up sharing their bed—and their bills —with a boyfriend. These boyfriends seldom contribute a lot, but they usually contribute something.

Casual boyfriends help single mothers survive with less public support, but it does not follow that public policy should encourage single mothers to depend on them. Such a policy often pushes women into abusive relationships with men on whom nobody should have to depend. Encouraging single mothers to depend on casual boyfriends also leads to more unplanned pregnancies, more abortions, and more unwanted children. Indeed, such arrangements are often so unsatisfactory that single

What Can Fathers Contribute?

Employment status and annual earnings of men aged 18 to 34 in 1990, by education and race

Age and race	No High School	Some High School	High School Graduate
Percent of 25 to 34 year old men with no earnings in 1990			
White	16.0	6.8	3.9
Hispanic	8.9	9.3	6.3
Black	52.1	24.0	9.4
Mean earnings of 25 to 34 year old men who worked			
White	12,837	16,108	22,312
Hispanic	12,344	14,808	17,861
Black	—	10,935	15,888
All	12,689	15,399	21,371
Percent of 25 to 34 year old men who worked full-time, year-round			
White	49.5	54.5	72.1
Hispanic	55.9	58.5	66.0
Black	—	40.9	61.8
Mean earnings of 18 to 24 year olds			
All men who worked	$8,800	$6,879	$11,186
All men who worked full-time, throughout 1990	12,710	14,613	15,829

Source: U.S. Bureau of the Census.

The sample sizes in empty cells are too small to yield reliable estimates.

The data do not cover men living in prisons or other institutions, members of the armed forces, the homeless, or men living in conventional households whose presence was not reported by the household head.

mothers prefer prostitution, which some find less emotionally demanding and which usually brings in more money.

If we want to give single mothers the option of not depending on men, I fear we must turn to the solution conservatives hate the most, namely using tax dollars to make up part of the difference between what unskilled single mothers can earn and what they need to support their families. The simplest way to do this is through the Earned Income Tax Credit (EITC), which gives employed parents with children a refundable credit if their earnings are low enough. At the moment, EITC is popular with legislators, because it only helps those who work. In addition, it lowers tax revenues instead of increasing expenditures, which looks good in the newspapers. But an EITC that could raise a single mother's income from $9,000 to $15,000 would inevitably arouse conservative ire, both because it would give a lot of money to people who sometimes spent it foolishly and because it would weaken recipients' incentive to work more hours.

The best way around this particular political problem is to supplement the EITC with programs that cut single mothers' expenses by paying for their children's medical care, food, and day care. Ideally, such programs should cover all children, regardless of income, so as to ensure that they win broad political support.

Even if we remain unwilling to provide universal health insurance, for example, we should at least make Medicare cover all children whose parents pay Social Security taxes. That would mean raising Social Security taxes, but it would also cut in-

surance costs for families that now insure their children privately. The only losers would be families with jobs and no children, who also happen to be the group that can best afford a modest tax increase.

We should also eliminate income tax deductions for dependent children and replace them with food stamps for children at all income levels. All families with children could get a year's worth of food stamps when they filed their tax return, minimizing auditing expenses. Such a system would eliminate the social stigma now attached to cashing food stamps, while increasing parents' incentive to work.

Finally, we could provide families in which all adults worked full-time with tax credits for, say, half the cost of enrolling their children in a preschool or after-school program that met certain minimal educational standards.

In other cases it makes more sense to direct programs primarily at low-income children. Historically, for example, federal housing funds went mainly to build large city-owned projects reserved entirely for the poor. Rents in these projects were limited to 30 percent of the tenant's reported income, which was often almost zero. This policy was, in effect, a way of bribing poor parents to live near other poor parents. That was a plus for more affluent parents, but it has had terrible effects on many of the children involved, who grow up in communities where crime is a way of life and no one takes school very seriously. More recently, we have moved away from city-owned projects and have begun subsidizing tenants in private housing, but in practice most of this housing is still located in very poor neighborhoods.

A child-oriented housing policy would concentrate on giving low- income parents strong incentives to live in better neighborhoods, where their children would be safer and would attend better schools. Chicago's Gautraux program, initiated as a result of a court order designed to eliminate racial segregation in the city's housing programs, has been doing this for many years and has yielded impressive benefits for children. The Gautraux program offers black mothers an apartment in a white suburb, and then makes up the difference between the apartment's market rent and what the federal government thinks she can afford to pay, namely 30 percent of her income. It is important to recognize, however, that a program of this kind will not work unless its benefits are restricted to those who are willing to move. If we offer poor black mothers a housing subsidy they can use wherever they want, past experiments with rent vouchers show that most will remain in their old neighborhood.

If we did all these things, any single mother who worked regularly would be able to make ends meet, even if she held only a minimum wage job. If she got child support, she could even take her children to a movie now and then. But these programs do not help single mothers who cannot find steady work. What are we to do for them?

So far as I can see, single mothers who cannot find jobs after their AFDC runs out have no more—and no less—claim on the public purse than married parents who cannot find work after their unemployment benefits run out. If a jobless single mother is mentally or physically ill, she should get disability benefits just like anyone else. If she cannot find work because the whole economy is in recession, her AFDC benefits should be extended, just as unemployment benefits usually are. If she cannot find work because she lives in a permanently depressed area, she may have to move, just as married couples do. I personally think a strong case could be made for having the government serve as an employer of last resort in certain cases, but I doubt that Congress will do this any time soon.

Reform at What Cost?

Setting up a program that allowed all single mothers to make ends meet would not be cheap. A two-year time limit on AFDC would save perhaps $18 billion a

year, but there were 7.7 million families headed by women with children under the age of eighteen in 1990, and 4.3 million of them had incomes below $15,000. Raising all these families' incomes to $15,000 a year would cost about $33 billion, even if we did not give any benefits to anyone else. We should be able to get perhaps $5 billion of this from absent fathers, but even allowing for the $18 billion saved by the two-year limit on welfare, that leaves a $10 billion tab for taxpayers. If we want all these families to get goods and services worth $15,000 while at the same time ensuring that everyone has a significant incentive to take a better job, we also have to give some benefits to people who earn more than $15,000. By the time we are done, such a program could easily raise government expenditures by $30 billion to $50 billion. If we extend benefits to children in two-parent households the bill could be even higher, as it usually is in Europe.

Why should a program that asks more people to work end up demanding more money from taxpayers? We know that several million single mothers are currently getting by on low-wage jobs that pay less than $15,000 a year. Why can't we just insist that welfare mothers do the same thing? The answer is that single mothers with low-wage jobs currently survive by making arrangements that not all mothers are willing or able to make. One lives with her mother. Another has a boyfriend who beats her up but whom she does not throw out because he also helps pay the rent. A third sometimes works as a prostitute at the hotel where she cleans. A fourth leaves her children home alone after school because she cannot afford paid child care. But we cannot create a system that assumes all single mothers will make such arrangements. If we try, a lot more single mothers will be unable to make ends meet, and we will end up with more families in shelters and more abandoned children in foster care.

Yet as soon as we construct a system that allows a woman with a minimum-wage job to pay her bills without depending on anyone else, a lot more women will choose to exercise this option. The woman who now lives with her mother will move out, and the woman whose boyfriend beats her up will kick him out. The prostitute will turn fewer tricks, and the woman who works until five will get paid child care. Single mothers' lives will be a lot better, but there will probably be more of them, and taxes will certainly have to be slightly higher. In my judgment, a program of this kind would be worth the price, both because it would make children and single mothers better off and because it would do so in a way that is consistent with deeply held American values about work.

My rough guess is that creating such a system would require us to raise the tax burden from 34 to 35 percent of gross domestic product—the equivalent of about one year's growth in personal income. Neither Clinton nor anyone else could easily raise such a sum in today's political climate. One must therefore ask whether America could make a more gradual transition from today's welfare system to a new system based on the expectation that women should work, spending a few billion dollars in the first year, slightly more the second year, and so forth. This is certainly feasible, but only if we keep the present welfare system intact until we have created an alternative for mothers who take low-wage jobs.

Indeed, Congress has been moving in this direction since the mid-1980s, gradually expanding benefits for the working poor while doing very little for welfare recipients. If we increase the Earned Income Tax Credit again, if we extend Medicaid to all poor children, if we expand federal support for child care, and if we were to create a new federal housing program especially for working single mothers, we could gradually make it possible to support a family on lower and lower wages. At that point we could impose Clinton's two-year time limit on AFDC.

But until we make it practical to support

a family on a minimum-wage job, setting a time limit on AFDC will impose huge costs on many poor children and their mothers. That fact has defeated all previous efforts to abolish or drastically change AFDC, leaving us with a system very similar to the one the New Deal established in the 1930s. With growth rates low and resistance to new taxes high, improving the position of working single mothers is likely to take at least another decade of incremental change, and even that will suffice only if both liberals and conservatives recognize the long-term benefits of such a strategy. That means major changes in AFDC will also have to wait.

In the absence of radical reform, however, political discussions of welfare are likely to become steadily nastier. Everyone now agrees that we should encourage single mothers to work. Conservatives want to do this by cutting welfare benefits, passing rules, or both. Liberals want to do it by making work more rewarding. The conservative approach is unlikely to work, because middle-of-the-road legislators are seldom prepared to adopt policies that leave a lot of welfare recipients homeless and force a lot of mothers to abandon their children, and without that ultimate sanction, coercion cannot succeed. The liberal approach may work eventually, but it will not work any time soon, because it requires a lot of money that most Americans are currently unwilling to spend.

The effect of this impasse is a lot of grandstanding and name calling. Such partisan maneuvering creates a constant danger that both liberals and conservatives will lose sight of the ultimate goal, which is to create a system that rewards self-help. To achieve that end liberals must join conservatives in trying to make sure that mothers who work do better than mothers who do not. If liberals fail at that, as they have over the past half century, the public will continue to see welfare as a menace, and will continue to punish legislators who appear intent on making it more generous. If we create a system that rewards work, the politics of helping the poor would be completely transformed. Americans love to help people who are trying to help themselves.❖

The Limits of Teledemocracy

Michael Schudson

Criticism of television's impact on democratic debate has given rise to a growing list of remedies: longer soundbites on the evening news, new procedures for making presidential debates more illuminating, more diverse broadcast formats for questioning candidates, even nationwide electronic town meetings. Refurbishing public discourse is a worthy cause, but will it cure the massive ills of modern democracy? Is the problem with our politics, at its root, a failure to communicate?

If these proposals were enacted and succeeded in expanding citizen participation in elections, they would be laudable. Still, they would do nothing to ensure that government is more responsible, responsive, and effective so that people would feel continuing reason to participate.

But, worse, carrying out these proposals would do little to increase citizen involvement. Even the most radical reform, the electronic town meeting, is unlikely to increase public participation in government. After the novelty wore off, such meetings probably would not attract a much larger audience than face-to-face town meetings, and the record of those is not encouraging.

In seventeenth-century Dedham, Massachusetts, town meeting attendance typically exceeded 70 percent, according to Jane Mansbridge's study, *Beyond Adversary Democracy*. But this impressive figure was attained only where every inhabitant lived within a mile of the meeting place, a town crier visited the house of each absentee half an hour into the meeting, fines were levied for absence or tardiness, and only some sixty men were eligible in the first place. In Sudbury, a town that imposed no fines, attendance averaged 46 percent during the 1650s. Overall, Mansbridge estimates that 20 to 60 percent of potential voters attended meetings in eighteenth-century Massachusetts.

Results from experiments in electronically mediated democratic forms are no more encouraging. F. Christopher Arterton, whose book *Teledemocracy* is the most comprehensive review of these experiments, finds "little support for the notion that citizens have the interest necessary to sustain near universal participation." Arterton concludes, "Most citizens, probably around two-thirds, will not participate."

These unsentimental assessments—something of a cold shower for teledemocracy—should not keep us from taking seriously ideas for improving the format and technology of democratic discourse. The proposed reforms of electioneering are based on the correct premise that different media and communicative settings affect the messages that get through. A kind of soft McLuhanism—not that the medium is the message, but that the medium shapes and constrains the message—is as sensible as McLuhan's determinism was absurd. Some grievances, some questions, some

original solutions or proposals are more likely to emerge in particular media systems than in others.

The potential impact of media forms suggests a need for pluralism. What might we learn about our candidates, and about ourselves, through different media and varied formats? We don't know until we try.

New Media, New Publics

New forms of communication create different kinds of public discussion, and even different publics. Talk radio, for example, offers a striking contrast with traditional settings for public debate. The anonymity of the radio talk show format provides an occasion for many who might not feel comfortable speaking up at a PTA meeting. And the pressure on callers as well as host to be clever, knowing, and perhaps cynical often draws out a kind of exchange unheard at the PTA. It would be horrifying if this were the only model or dominant model of political discourse, but it is fine, perhaps bracing, that it is one among many forms of political talk available.

Some critics believe that no good can come of talk radio or an electronic meeting because they are not Greek agora or face-to-face town meetings in classic New England style. But face-to-face communication does not guarantee authenticity, nor do the electronic media preclude it. Sometimes, in fact, impersonal media improve communication. Many people have the experience of expressing something in a letter that they were unable to say face-to-face. One study some years ago found that middle-class people learned most about their children's school from face-to-face conversations with teachers, but working-class people typically learned more about the school from print and broadcast media. In teaching a lecture class of 400 students, I have found that when students could ask questions or engage in conversation with me by e-mail, I got much more comment (and, interestingly, on a first name basis!) than I ever had in face-to-face office hours.

New forms of communication create different kinds of public discussion, and even different publics.

So there are no grounds for automatic distrust of the newer and more mediated forms of communication. They open up new possibilities. As these examples suggest, they have a democratic effect, lowering the barriers that class and status set in the way of open communication.

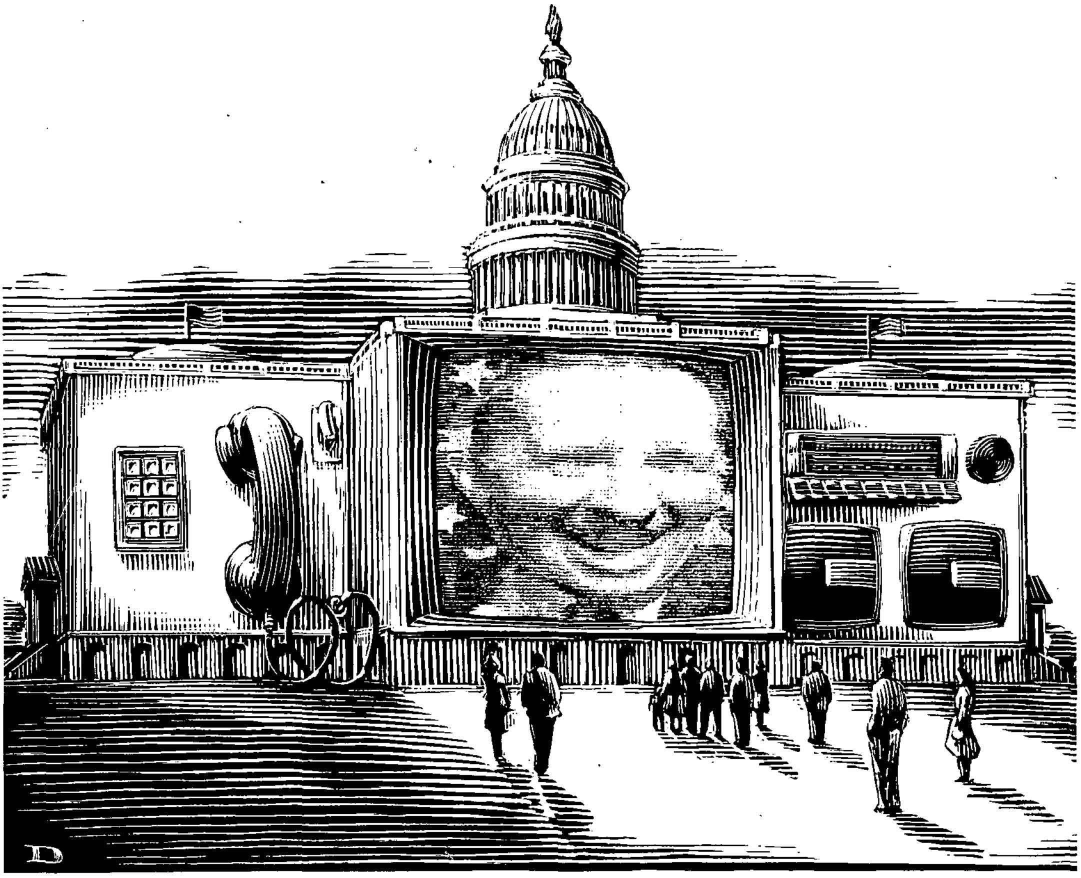
I do not worry, as some have, that with Jerry Brown's 800 number, Ross Perot on Larry King, and Bill Clinton on Arsenio Hall and MTV, our presidential candidates have been reduced to mere entertainers. From the 1790s on, similar fears have animated American conservatives each time a party or candidate found a new way to address the people, especially the less politically active, more effectively than before. The most recent attempts to reach out to the disaffected and break through the conventional forms have improved political communication and helped democratize the practice of presidential campaigning.

Democratic Delusions

As additions to the repertoire of political talk, the new media forms should be welcomed. But as a substitute for politics, the new forms of direct teledemocracy could become quite dangerous.

The dangers are of two kinds—the substitution of ritual for genuine politics and the creation of a form of direct democracy that short-circuits representative government. On the one side, there is the possibility that new forms of political communication will become a mere palliative, if there is no real chance government will act to remedy the problems the talk is about. On the other is the potential for manipulated public decision.

Ross Perot's proposal for nationwide electronic town meetings raises this second



problem. Unlike other suggested reforms, Perot's aims not to enhance voting decisions or citizen communication with representatives but to replace the Congress with the direct plebiscitary decision-making.

This takes up an old dream, or nightmare, of what democracy might be if we only had the technical capacity to register popular moods, morals, or preferences instantaneously. A century ago, Lord Bryce envisioned a stage of history when the will of the majority might "become ascertainable at all times, and without the need of its passing through a body of representatives, possibly even without the need of voting machinery at all." Should this come to pass, then "public opinion would not only reign but govern." Today, with interactive cable systems and 800 numbers, the Brycean dream could become a reality. But is it a dream worth pursuing?

No, and certainly not in the vague form in which Ross Perot presented it. His vision seems to be Bonapartist—one leader, one people. "We go to the American people on television, explain it in great detail, and say, 'Here are the alternatives that we face. Which of these alternatives, as owners of the country, do you feel is best for the country?' The American people react, by congressional district, and we know what the people want."

Who is the "we" in front of the public? It seems to be an imperial, or at least presidential, "we." Would different parties present different alternatives? Apparently not, not in the view of a man who scoffs at parties and thinks governing is just a matter of getting down to business.

Polling, whatever its many defects, has

taught one clear lesson: the answer depends on the question. Even subtle differences in question-wording can have profound consequences for the answers people give. In short, those who determine the agenda set up the outcome. Electronic town meetings would not "tell us what the people want." They would tell us how a minority, the attentive public, answers questions framed by a president who, in Perot's system, would be a frighteningly strong leader. This is tell-a-democracy, or perhaps sell-a-democracy, not teledemocracy.

For Perot, as for too many others, public opinion consists of individual preferences and values; the task is simply to find a technique good enough to ascertain them. For most democratic theorists, on the other hand, public opinion consists of opinions formed in public, as people collectively face public issues; it is not a set of inclinations, grunts, and nods of approval and disapproval privately evolved and privately expressed to a pollster or voting machine. Democratic theory typically (and rightly) envisions a system of government organized as much to foster deliberation as to guarantee participation.

Perot's proposal for instantaneous mass decision making actually seems to have fewer safeguards than are available for important consumer decisions. People may have waiting periods (to buy a gun or to get a marriage license) or have to sign contracts in the presence of witnesses or may even have three days after pledging their fortunes to a door-to-door salesman to change their minds. All this helps ensure a level of serious consideration in private transactions. It would seem strange indeed to call for less rigorous protection for public deliberation.

No Bypass

There is a delusion that sometimes accompanies talk of electronic democracy—that somehow citizens' direct communications with candidates will bypass the professional and obstructive news media. But even the best proposals, like James Fishkin's deliberative poll (see accompanying article) depend mightily on the effective functioning of the professional news media. What Fishkin's deliberative opinion poll and Perot's electronic town meeting

> *Democratic theory typically (and rightly) envisions a system of government organized as much to foster deliberation as to guarantee participation.*

and talk radio and other proposals all lack is follow-up. When the town meeting is over, the stage returns to the candidates trailed by the press plane or press bus.

Recall Gerald Ford's presidential debate with Jimmy Carter and Ford's gaffe about the Soviet Union not dominating Poland (he was more right than he knew!). This remark was almost completely ignored by the general viewing audience. Two hours after the debate, viewers gave Ford a victory by 44 to 35 percent; but by noon the next day Carter was the winner 44 to 31, and by that evening Carter was judged the winner 61 to 19. What happened in the interim? The news professionals got into the act.

Now, perhaps the news media blew Ford's remark out of proportion. I am not arguing that what professional journalists provide is the best approximation to the truth. But they do offer constant scrutiny in a presidential campaign (this is much less true, regrettably, in state and local elections). With daily publication, they have the opportunity to monitor candidates over the long haul (and to monitor officials in office). Only a small percentage of the electorate actually saw Ross Perot on Larry King, or Bush or Clinton on the morning news shows. Most of us know about them thanks to the mainstream news media.

Regularly interacting with colleagues and politicians, the political reporters educate one another about politics in a way

that sharpens their focus. This is not to say there are no dangers of media feeding frenzies and parochialism—those dangers are serious. It is not to say that news professionals do not have their own biases—they do. It is to claim that they represent a vital community of discourse—the best we have.

Proposals for more debates or better debate formats or "nine Sundays" of extended programs on presidential issues or longer soundbites on the evening news or wider use of talk radio and talk television or experiments with new formats and forums for presidential campaigning all stand some chance of keeping the news professionals more honest, forcing them to listen to voices and styles of discourse they do not control. The new formats supplement and enliven standard news practices. They do not replace them. They can contribute in modest ways to the quality of public discussion in presidential campaigns. But that discussion still comes most fully into focus in the mainstream press.

And that discussion still fundamentally depends on the two leading political parties and their candidates. The excitement of the 1992 campaign has much less to do with the communication experiments than with the unlikely prospect of a unified Democratic Party at a moment of Republican vulnerability. The possibility of a Democratic presidential victory for the first time in sixteen years, coupled with the substantive differences between the parties—on health care, education, industrial policy, and abortion and other social issues—generates the excitement. As always, it is the substance of politics that makes reforms in the framework of public debate worth thinking about.❖

Talk of the Tube

How to Get Teledemocracy Right

James S. Fishkin

American politics is suffering from a near-fatal attraction to direct democracy. Symptoms of this attraction include the proliferation of referenda, particularly in the western states, and the credibility given to Ross Perot's proposal to introduce "electronic town halls" in which television viewers would call in votes on current policy issues.

We have also brought elements of direct democracy into presidential selection by creating a nominating system dominated by the direct primary. Since 1968, when Hubert Humphrey won the Democratic nomination without entering a single primary, the number of states holding primaries has grown from seventeen to thirty-nine; primaries are now the televised battleground where the nomination is effectively decided.

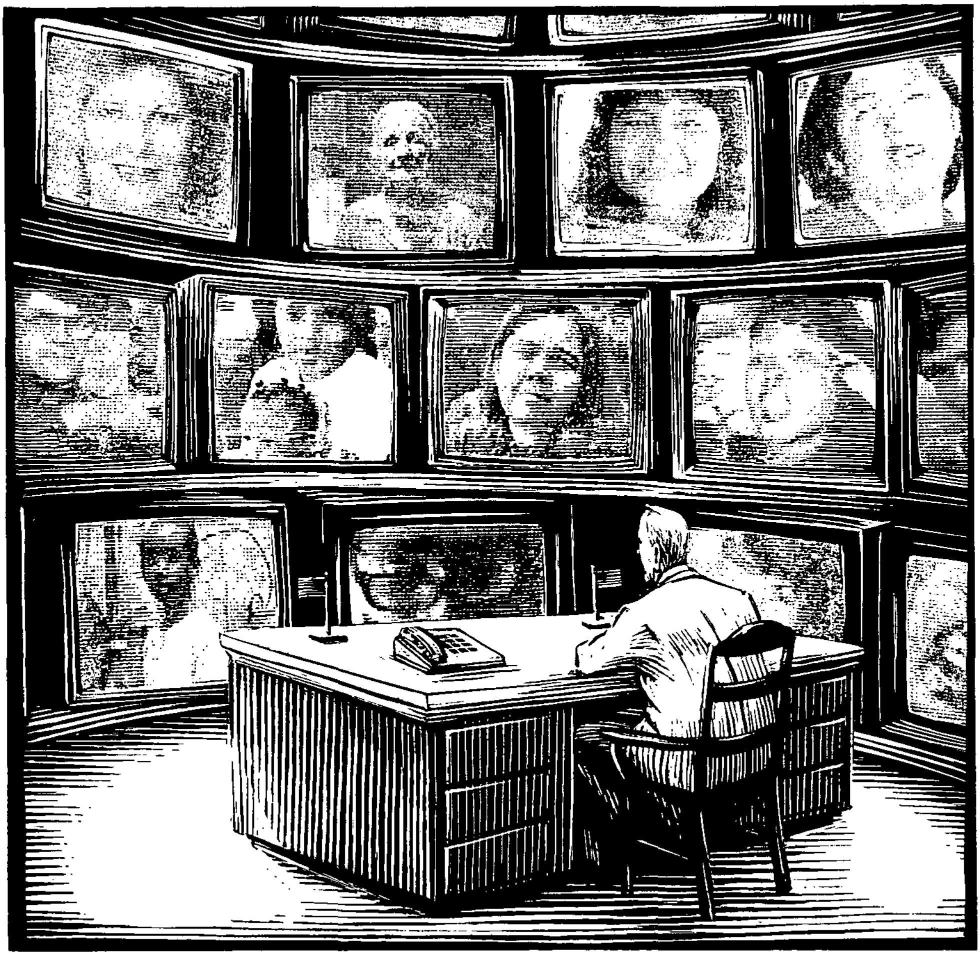
In addition, a near-daily supply of opinion polls, reporting the approval levels of candidates and the popularity of various positions, has given us a system that is far more plebiscitary in its use of direct democracy than textbook analyses of American institutions would suggest. Political scientists from the late V.O. Key, Jr., to Giovanni Sartori have compared the interaction of television and opinion polling to an "echo chamber" in which polls bounce back impressions presented in the mass media. Despite their volatile character, these polls set the terms of political competition and dominate the agenda for public debate.

What's more, the media reports poll results as if they were solid constructions able to support platforms and candidacies. The political landscape is altered beyond recognition when presidential approval ratings drop from 91 percent to 30 percent, as they did between spring 1991 and summer 1992 for President Bush. Or when an enigmatic billionaire is able to climb the polls from nowhere to become, if only briefly, the leading candidate for the presidency without contesting a single election. When General Schwartzkopf was substituted for Ross Perot as a presidential challenger in one poll, he did almost as well, revealing the flimsiness of the public information base on which the Perot challenge rested.

Three central factors—television, polling, and the impulse to bring the people directly into the process—have given us a thin democracy of stylized impression management. Yet, as I will suggest, these same three factors could be turned to a constructive purpose to give greater substance to our democratic processes.

Couch Potato Democracy

This campaign season has initiated a number of new variations on these themes. Some changes have improved the system in



minor ways, while others have only increased the superficiality of our increasingly plebiscitary televised democracy.

The hallmark of the season has been the proliferation of opportunities for citizens to respond to what they see on television. Citizens have been given opportunities to join in the dialogue, to call in for information, to call in questions to live broadcasts, and to participate in town meetings. Supplementing the shrinking soundbite democracy of conventional news coverage, many hours of "talk show democracy" have been broadcast on national television. The advantage has been an increase in the breadth and spontaneity of the televised political dialogue. The disadvantage has been the addition of new pseudo-voices for "we the people" to the campaign process.

Conventional news coverage continues to filter opportunities for the candidates to talk directly with the public. In well-known, parallel studies, Kiku Adato and Daniel C. Hallin showed that the average candidate "soundbite," the period in which a presidential candidate could speak uninterrupted on the evening news, shrank from about forty-two seconds in 1968 to about nine seconds in 1988. Recent studies by the Center for Media and Public Affairs show that during the 1992 primary season, this shrinkage continued. The average candidate soundbite has now diminished to 7.3 seconds.

The move back to a more extended discourse would depend on the interaction of network norms of coverage and candidate calculations. CBS announced that it would attempt to counteract this trend with a guaranteed minimum length for sound-

bites of thirty seconds, but the policy has produced controversy because in practice, it ends up omitting candidate statements. Meanwhile, the candidates have learned how to speak in nine-second bites to get on the news. So for now the effective political discourse reaching the mass public is mostly the shrinking soundbite, a medium that reduces political debate to messages worthy of bumper stickers or fortune cookies.

A major factor counteracting this trend, at least during the primary season, was the loosely coordinated effort to broadcast debates. From December 15, 1991 to March 15, 1992, eleven debates were televised nationally. While these debates offered a substantive contribution for those who listened, they did not transform the effective political discourse reaching the mass public.

By and large, the public learned about the candidates from the soundbites the evening news produced rather than from watching the debates themselves. Ratings of the major network broadcasts ranged from a low of 2.1 for the climactic CNN/League of Women Voters debate before the New Hampshire primary to a high of 5.5 for the ABC debate March 5 in its "Nightline" slot. (Each rating point is a percentage of the 92.1 million television households and represents 921,000 households.) These ratings put the debates squarely in the bottom ninth of network programming in their respective weeks. Unlike the final presidential debates of the general elections, primary debates, when candidate selection is a live issue, have not attracted large audiences. (In contrast, the 1988 presidential debates in the general election were estimated to have drawn more than 160 million viewers.)

Notably, when these debates were turned into soundbites and newspaper stories, they were reported mostly in terms of whatever conflict, controversy, or confrontation they generated. The first debate, on NBC, was most notable for the flap over Jerry Brown's advertising his 800 number on the air and for Harkin holding up a dollar bill to symbolize the value of the middle-class tax cut. The CNN debate in New Hampshire was reported mostly in terms of the fire Paul Tsongas drew for his support for nuclear power. The Denver debate is remembered for Tsongas's response to Clinton that while he might not be "perfect," at least he is "honest." The Dallas debate was notable for Clinton's rejoinder to Brown that he should "chill out," a phrase that Hillary later took credit for in the press.

The debates were only intermittently enlightening (with the possible exception of the MacNeil/Lehrer debate on PBS), even for the few citizens who watched them. But the greater damage may have been that to the extent the debates did reach the public, they came as sensational, recycled soundbites. The debates, then, while a noble effort, did not transform the effective political discourse reaching the public.

Another noble effort worth mentioning is the opportunity the Discovery Channel provided to all the major candidates to communicate for twenty minutes each directly to the public, without the filters of pundits or editors. Unfortunately, the broadcast achieved a rating of only about 1.5, reaching about 1.2 million of the nation's television households. Because the format produced neither drama nor conflict, it was not widely reported and produced very few soundbites.

Talk, Talk, Talk

A major departure this campaign season has been the use of talk shows. Perot announced his possible candidacy on "Larry King Live" on CNN. Both Clinton and Perot fielded questions from viewer call-ins on the "Today Show" and "CBS This Morning." Perot held a two-hour "Nightline" town meeting on ABC while Clinton held a ninety-minute town meeting on MTV. In one of the most ambitious talk show forays into politics, Clinton and Gore appeared for two hours on "CBS This Morning" with questions from a studio audience, live satellite connections to remote locations around the country, and questions collected from

viewer letters. This format was successful in combining viewer input from around the country with follow-up questions from the talk show hosts so as to yield a more sustained dialogue.

President Bush tried his hand at the town meeting format by talking with handpicked visitors to the White House on "CBS This Morning." Bush argued that town meetings were nothing new. He had, after all, campaigned in 1980 and 1988 with broadcasts of voter forums entitled "Ask George Bush." However, those forums were scripted, a practice that got Bush in trouble more recently when he complained to a live mike last December that he had been asked the questions in the wrong order in an ostensibly spontaneous question-and-answer session in a teleconference to a California teacher's convention.

The main benefit of talk show discussions with ordinary citizens has been the injection of spontaneity into the political dialogue. Talk shows permit us to examine candidates for longer than a shrinking soundbite and they do so under conditions that may produce spontaneous exchange. Instead of press questions focusing on the horse race and political strategy, ordinary citizens have tended to raise more substantive questions about the economy, health care, and other issues that touch their lives directly.

Still, while citizen questions on the talk shows have been notable for their substance (if not for their follow-ups), host questions retain a whiff of the sensationalism that is part of the regular agenda of such shows. Talk shows tend to treat politicians as just another group of celebrities. Hence it was Phil Donahue who relentlessly pursued Clinton about Gennifer Flowers and draft issues before the New York primary, only to be upbraided by a member of his studio audience who wanted substantive questions. And when Stone Phillips interviewed President Bush on "Dateline NBC," the president threatened to cut the interview short rather than face a question about alleged adultery, a question Phillips was told he should be "ashamed" to ask in the inner sanctum of the Oval Office. Conversely, talk show democracy blurs the distinction between politician and media figure by allowing such figures as Pat Buchanan, Jesse Jackson, John Sununu, and David Gergen to alternate between roles.

Of course, the talk show or town meeting ideals hold out the promise of even more radical departures from conventional political coverage. In addition to lengthier, more spontaneous dialogue, television viewers may also see their reactions tabulated, in some process that appears analogous to voting. This was, of course, the basic idea behind Perot's proposal for the "electronic town hall." As Perot described it, major issues, such as the budget deficit or health insurance, would be explained on the air "in depth, not in soundbites." Viewers would then call an 800 number "by Congressional district." This feedback, Perot promised, would be tallied and used to get the White House and Congress "dancing together like Fred Astaire and Ginger Rogers."

Something very close to Perot's proposal briefly saw the light of day last January, after the President's State of the Union address. In a pilot for a possible series called "America on the Line," CBS tabulated about 300,000 viewer responses to questions about the President's speech and the state of the union. However, the viewers who decided to phone in their responses to the CBS program presented a distorted picture of public opinion, at least when contrasted with poll results from a representative sample asked the same questions (and reported by CBS). For example, 53 percent of "America on the Line" respondents said they were "worse off" now than a year ago, while only 32 percent of the representative sample said so. Only 18 percent of "America on the Line" respondents reported they were in the "same" economic situation as a year ago, while 44 percent of

the representative sample reported being "the same."

This kind of electronic town hall has two fundamental defects—it is neither representative nor deliberative. It is not representative because the sample is self-selected. Instead of being chosen through the methods of modern survey research, through a random statistical process, viewers at home select themselves by their decisions to call in.

Viewers calling in to an 800 number constitute what Norman Bradburn, Director of the National Opinion Research Center at the University of Chicago, has called a SLOP—a self-selected listener opinion poll. A SLOP played a role in distorting media coverage of the Carter/Reagan Presidential debate in 1980, when ABC used viewer call-ins (in this case with charges for calling a 900 number) to declare Reagan an instant two-to-one winner, as compared with random samples that viewed the debate as a close contest. Like the *Literary Digest* fiasco of 1936, which predicted a landslide for Alf Landon over Franklin Roosevelt, self-selected samples draw disproportionately from those who feel strongly enough to call. Large numbers do not by themselves offer any indication that the self-selecting viewers represent public opinion. CBS has reported that over 24 million calls were attempted to "America On the Line," but far more accurate results could have been achieved from a carefully constructed random sample of several hundred.

Neither is the electronic town hall deliberative. Citizens are expected to phone in their reactions off-the-cuff, have little opportunity for debate or for consideration of alternative views, and often they have little background information. This points to one of the biggest quandaries of direct democracy in a large nation-state: the belief that there is little reason to bother learning about candidates and issues because it is so easy to calculate that one vote is unimportant and will have little effect on the outcome.

One of the more inventive departures this election season has been directed at this problem of underinformed voters. The Center for National Independence in Politics has launched "Project Vote Smart" providing an 800 number, advertised on CNN, which citizens can call to get nonpartisan information about candidate positions. The same device, advertising a number for citizen information on television, has been employed by the notorious Floyd Brown (of Willie Horton ad fame). In a new twist on negative campaigning, Brown offers callers the chance to hear tapes of conversations between Gennifer Flowers and Bill Clinton.

In either case, the problem of individual incentives for information remains. Primaries, referenda, and opinion polls have brought power directly to the people, but under conditions where the people have little motivation to think about the power they are supposed to exercise.

Is there some way of getting over this problem of effectively motivating ordinary citizens to acquire political information and deliberate about it? Some recent experiments, both in this country and in Britain, suggest a new way of combining television and survey research. In five different British elections, Granada television took a random sample of 500 citizens from a benchmark constituency in northern England. After discussing the issues for a couple of weeks, these 500 citizens were transported to London, where they appeared in a televised question-and-answer session with the three party leaders, to be broadcast a few days before the British general election.

Unlike American "town meetings," which have employed either haphazard collections of people in a studio audience or viewer call-ins, the Granada 500 group was a statistically representative sample that was also prepared on the issues. However, the Granada 500 took no votes, made no decisions. It simply offered a new kind of forum for questioning the candidates, forcing them to confront issues of direct relevance to ordinary citizens.

The Jefferson Institute in Minnesota has been experimenting with "citizens' juries" that question candidates and deliberate about their positions. In cooperation with the League of Women Voters, it has held such juries in Minnesota (in a Minneapolis mayoral election and on various policy issues), and it plans to hold a similar forum, in cooperation with local television stations in Pittsburgh and Philadelphia, in the Pennsylvania Senate race this fall. In contrast to the Granada 500, citizens' juries vote on the candidates. However, it is worth noting that with juries of eighteen people, they cannot be statistically representative of the entire population, as a full-scale random sample would be.

Both the citizens' jury and Granada 500 use randomly chosen citizens who are given the opportunity to deliberate about public policy and who are, in addition, offered the chance to question candidates on television. These elements are both included in my own proposal for a "deliberative opinion poll" at the start of the primary season on national television. Instead of a random sample of a benchmark constituency, as with the Granada 500; or a group the size of a jury, as with the Jefferson Institute, I have proposed that we take a full-scale national random sample of 600 people and transport them to a single site where they can question the presidential candidates in person on national television. Even if the viewing audience were limited to the comparatively small audience of primary debates, the results of such a deliberative poll at the start of the primary season would receive enough coverage to play a major role in launching candidacies and issues so as to reform the "invisible primary"—the initial period of the nomination struggle that has come to largely determine the nominee in an increasingly front-loaded presidential selection system. Hence the timing of such a televised deliberative poll could give it an influence far beyond the 600 delegates and far beyond its viewing audience.

A deliberative poll harnesses to a constructive purpose the same factors that have, thus far, only trivialized our mass democracy—television, polling, and the impulse to bring the people directly into the process. A deliberative poll brings the people into the process but in a statistically controlled way; it uses the techniques of polling but under conditions where the responses represent more than echoes of shrinking soundbites; it uses television to amplify deliberation rather than to disseminate canned material or advertising.

> *Elected leaders are representative only to the extent that voters pay attention. Otherwise they exist in an echo chamber of their own.*

An ordinary poll models what the public thinks, however little the public knows or pays attention. A deliberative poll, by contrast, models what the public would think—if it had more opportunity to think about the questions, more information about the issues, and opportunity to question candidates extensively. Like the advent of talk show democracy, a deliberative poll would add depth and spontaneity to the dialogue. However, it would do so with a carefully constructed sample that would have every incentive to pay attention and take the process seriously. Members of the sample, unlike ordinary citizens viewing the campaign at home, would be motivated to pay attention because they would appear on national television with the candidates. The problem of incentives for information and deliberation is solved for members of the sample, and the results are then amplified by the television broadcast.

I offer this proposal not as a panacea but as a televised demonstration of an alternative democratic model. Recall that the direct primary is, itself, a relatively recent innovation fostered primarily by the Progressives early in this century and, in a second wave of reform, by the McGovern-Fraser Com-

mission reacting to the fiasco of the 1968 Democratic nomination struggle. Experimentation with alternative models is clearly called for, even if there is no single proposal that can, by itself, guarantee a credible system.

Last year I joined with WETA, the Washington PBS station, to attempt to mount a televised deliberative opinion poll, the "National Issues Convention" to be broadcast for three days over PBS at the start of the primary season in January of 1992. While the event was cancelled for 1992 because it ran into funding difficulties, WETA has since joined with all ten of the nation's presidential libraries to sponsor the event in 1996 at the LBJ Library at the University of Texas at Austin. With luck and proper funding, the next primary season will begin with a deliberative opinion poll on national television.

To be sure, a televised deliberative poll or kindred forms of policy jury are neither a new form of direct democracy nor a substitute for the more usual forms of representative democracy. A functioning polity requires high voter turnout, responsible parties, a well-informed electorate, and competent elected officials whose job is to deliberate day in and day out.

However, our elected legislators are truly representative only to the extent that the voters pay attention. Otherwise, they exist in an echo chamber of their own. In that sense, a deliberative poll can serve as a kind of role model. It can demonstrate the capacity of ordinary citizens to appreciate the complexity of pressing issues; it can give elected representatives a more authentic form of feedback; and it can shame pollsters into resisting the temptation to oversimplify. Perhaps it can even help restore public interest in public issues. We shouldn't expect new forms of public deliberation to replace the ordinary mechanisms of democracy. Rather, we should appreciate their potential to infuse representative democracy with new life.❖

A Memo on Presidential Transition

Richard E. Neustadt

Editors' note: On September 15, 1960, Richard Neustadt, then a professor of government at Columbia, wrote a bold memo to candidate John F. Kennedy on issues for the anticipated transition. His memo, the first of a series, was subtitled "A Tentative Check-List for the Weeks Between Election and Inaugural." Professor Neustadt drew on his own insights from his influential book, Presidential Power, *which had been published the previous April. Today, Neustadt continues to teach, at Harvard 's Kennedy School. The memo, never before published, remains a classic. Depending on events in November, it may take on new relevance.*

1. The Problem of Another "Hundred Days"

One hears all over town about "another Hundred Days" once Kennedy is in the White House. If this means an impression to be made on Congressmen, bureaucrats, press, public, foreign governments, the analogy is apt. Nothing would help the new Administration more than such a first impression of energy, direction, action, and accomplishment. Creating that impression and sustaining it become a prime objective for the months after Inauguration Day. Since an impression of the Roosevelt sort feeds on reality, and could not be sustained by mere "public relations," establishing conditions that will foster real accomplishment becomes a prime objective for the brief transition period before Inauguration Day.

But the "Hundred Days" analogy can also be taken—and is being taken—as an expectation of fulfillment for every sort of legislative promise in the Platform and the campaign. Everybody tends to think of his pet pledge as the priority accomplishment for Kennedy's first three months. Yet that timing only brings us to the Easter Recess of the First Session of a modern

Congress!

These legislative wants are hard to square with a convincing demonstration of energy and accomplishment. "Another Hundred Days" as an impression of effectiveness is threatened by the promissory notes read into that analogy.

In terms of legislative action, the analogy to 1933 is not apt. Roosevelt then did not take office until March. He had four months to organize the take-over. Congress was adjourned when he entered the White House and was not due to assemble until December. It met in special session after his inauguration, on his call. It met, moreover, to deal with a devastating domestic crisis that was seen and felt by citizens, in their own lives, all across the country. Foreign relations, meanwhile, raised virtually no issues that could not be ignored or postponed. And Roosevelt had the patronage (old style) to dole out at a time when jobs of any sort were highly valued. What is the analogy with 1961?

In 1948, when Truman was re-elected, there also was much talk of "another Hundred Days." But when he was sworn in a second time, Congress had been in session for three weeks, organized, bills introduced, committees working. No sharply felt, widely perceived crisis faced the country. Instead, in all the realms of Cold War and of welfare undertakings—most of them unknown in 1933—government agencies and private groups pressed diverse legislative claims, citing campaign promises as their authority and jostling each other in the rush to take advantage of Truman's "honeymoon." Weeks before inaugural, the groups concerned had gained commitments from Congressional leaders (whether they committed Truman, or he, them, is in dispute) for early floor fights on FEPC and on repeal of Taft-Hartley. By the time those fights had failed, the "honeymoon" was over and the Session far advanced with little else done. In legislative terms, it is 1949, not 1933, that offers an analogy — and warnings — for 1961.

Unlike Truman, Kennedy *may* come into office in the midst of some sharp, overt international emergency, or in the train of a sharp economic slump. It is at least possible, however, that January 1961 will be a time of many incipient crises but no "crisis." So was 1949.

It follows that, for the transition period between election and inaugural, the guidelines ought to be: *Postpone whatever is postponable* in the mechanics of administration-building. Put off the novelties that have not been thought through. *Concentrate upon the things that are immediately relevant to showing real effectiveness* on and after January 20. And in the doing of those things, keep this objective uppermost. It is the key objective for the weeks after November 8.

The things that cannot be postponed are enumerated below. They are *roughly* in the order in which it seems desirable to deal with them, starting November 9.

2. *Organizing for a First Message to Congress*

The most important task in the transition is *the working out of strategy and tactics for an exploitation of the "honeymoon" ahead.* This means decisions on the substance, timing, publicity, *and priority* of legislative proposals to Congress. It means decisions of the same sort on discretionary executive actions. It means decisions on relationships between projected proposals and actions. It means weighing short-range gains against long-range troubles, political and other. It means judging what should be done in the President's name, and what should not, and how to enforce the distinction. It also means evaluating fiscal implications of proposals and of actions, both, and making some immediate decisions on taxation and the budget.

Not all of these decisions can be taken before January 20, but preparatory work needs to be far advanced by then: The issues should have been identified, the arguments defined, preliminary judgments entered well before Inauguration Day ...

The *first* thing to do is to make a plan,

deciding tentatively on the timing and the scope of such a message. This provides a target for everybody who has ideas, views, concerns about the program objectives of the new regime.

The *second* thing to do is to *establish "working groups" and get them moving* with the message as their target—both on things that should be asked of Congress and on things that could be pronounced done or underway administratively ...

The *third* thing to do is to get a "bird-dog" on the scene, *putting somebody in charge of staff work on the message.* This should be someone close to Kennedy, very much in his confidence and very much a "staff man" (but a tough-minded one). His job should be to see that all the working groups are working, the competitors competing, gaps filled, issues raised, arguments brought to focus, and the President-elect informed on who is doing what, with what, to whom. *This is a full-time job,* for the whole transition period and after. Its holder has to be much more than a draftsman; drafting is merely his hunting license; his hunting ground is foreign *and* domestic program, legislative *and* administrative. This is somewhat like Rosenman's work at message season in the Roosevelt White House, or like Clifford's and Murphy's in the Truman White House. But in many ways it is a broader and rougher job than theirs; they worked in an established context; this man will not ...

3. *Designating White House Aides*

After Election Day the President-elect will need a *small personal staff* to operate through the transition period and to take office with him. A few staff aides are immediately necessary; their names and jobs should be announced at once, so that importunate office-seekers, idea-peddlers, pressmen, legislators, diplomats, and cabinet-designers know who and what they are. These necessary jobs include:

1) **A Press Secretary**, whose work after the inaugural will be so much like his work before that he should have the title at the outset. On November 9, Kennedy will be transformed in the eyes of Americans *and foreign governments*. He will no longer have the leeway of a "campaigner." His statements will be taken with the utmost seriousness. *Everything* said and done in public need be weighed as though he were already President.

2) **An appointments aide**, to guard the door and manage the daily schedule. Whether this person should be designated "Appointments Secretary" depends on whether he is meant to have autonomy, after inaugural, or to work as a subordinate of some other aide. If subordination is intended, hold off on the "Secretary" part of that title.

3) **A "Number-one Boy,"** serving as a sort of first assistant on general operations, day by day. He could be called "Executive Assistant to the President-elect" and he could carry that title into the White House in lieu of Sherman Adams' title, "*The* Assistant to the President." It would be well to avoid reminders of Adams, not only for public relations but because, once in the White House, Kennedy may find that he needs several "number-one boys" for different aspects of the work; other things aside, Adams was a terrible bottleneck.

4) **The message-and-program aide** indicated above. If the man is a lawyer, and if Kennedy wants him around for comparable work in later months, he might be designated "Special Counsel" (FDR's invention for Rosenman). But he could just as well be called "Special Consultant" and his long-run status left in abeyance for the time being. What counts in the short run is his standing with the President-elect, not his title.

5) **A personnel consultant** (discussed below). Here again, it would be well to treat the job as ad hoc and avoid traditional White House titles for the time being.

6) **A personal secretary** who might remain just that after January 20, or who might carry higher status and more general duties afterwards, depending on the President's convenience and her capabilities. Meanwhile, it would be well

not to dispose of any traditional titles one might ultimately want for her.

These six should suffice as a nucleus to move into the White House, January 20, where they will find the Executive Clerk and his career assistants on the job for routine paper processing. Additional aides will certainly be needed for ad hoc trouble-shooting before inaugural; still more so afterwards. But until the needs are felt to be both clear and continuing, and until the men have been tried on the job, there is no reason to announce their designation as permanent members of the White House staff. Nor is there reason to give them traditional White House titles ...

In designating personal staff, two rules of thumb are indicated:

First, appoint men only to jobs for which the President-elect, himself, feels *an immediate and continuing* need, a need he has defined in his own mind, and can at once define for them. If the need is immediate but not continuing, offer a "consultantship," or put the man in a department and borrow him back.

Second, give appointees titles that square with the jobs to be done and choose no titles without thinking of their bureaucratic connotations in the outgoing regime. A title may attract a lot of "customary" business that the President-elect wants handled somewhere else, or not at all, or on which he prefers experimentation. A title also may connote a ranking in the staff that he does not intend.

If these rules of thumb are followed, most of Eisenhower's current staff positions will fall into abeyance on January 20. There is nothing wrong with that.

4. Designating Science and Security Aides

Two of the positions in Eisenhower's White House present special problems:

1) **The Science Adviser**. This post, created after Sputnik, is highly valued in the scientific community which would be disturbed if it were not filled by early December ...

2) **The Special Assistant for National Security Affairs**. There will be no outside pressure for filling this post and NSC can operate without it, for a time at least ... But if, for reasons of his own, the President-elect wants to make an appointment, both the title and the duties should be considered, in advance, with particular regard for the intended role of the Secretary of State, *vis-a-vis* NSC.

5. Designating Executive Office Aides

Soon after November 8, the President-elect will have use for *a principal assistant, at one remove from personal aides, who can backstop the White House* in coping with programming and administrative problems from Inauguration Day on. If he is to be of maximum assistance from the start, *the job to give him is the Budget Directorship* ...This Budget Director-designate should be conceived as someone capable of broad-gauged, general-purpose service to the President, *picking up the staff work that personal aides cannot give time to on a continuing basis ...*

Besides the Budget Director, there are three top appointive officials in the Executive Office: the Chairman of the Council of Economic Advisers, the Director of the Office of Civilian Defense Mobilization, and the Executive Secretary of NSC ...

6. Designating Cabinet Officers

There is no *operating* reason why Cabinet officers and heads of major agencies need to be designated immediately after election. With "working groups" established and key staff aides appointed ... one does not need Cabinet officers in order to get moving toward a fast start after January 20. Indeed, there is advantage in holding off on most Cabinet appointments until staff and working groups are launched; Cabinet members then would have a framework to fit into and could not wander off on their own. As a rule of thumb: *defer Cabinet and major agency designations until early December.*

A possible exception is the Secretaryship of

State. The Jackson Subcommittee favors using the Secretary not just as a department head but as a principal assistant *in the whole sphere of national security policy...*

A second possible exception is the Cabinet post, if any, where the present incumbent would be retained as a gesture of bi-partisanship. Nothing of the sort may be contemplated. But if it is, then obviously the sooner it were done the better ...

In choosing Cabinet officers (and heads of major agencies), the President-elect will naturally consider the usual criteria of geographic, party, and interest-group "representativeness." *Three additional criteria are worth bearing in mind*:

First is competitive balance among major differences in policy outlook, on which Kennedy does not choose to make up his mind for all time. This is a very tricky and important problem in "representativeness." If the President-elect wants both "conservative" and "liberal" advice on economic management, for example, and wants the competition to come out where he can see it and judge it, he needs to choose strong-minded competitors *and he needs to put them in positions of roughly equal institutional power*, so that neither wins the contest at a bureaucratic level too far down for the President to judge it. For example, if the Treasury (a powerful post) were given to a "conservative," it would not suffice to put his competition on the Presidential staff; at least two *Cabinet* competitors would be needed in addition.

Second is the chance for useful reorientation of a department's role with a change in its Secretary's traditional orientation. The Eisenhower Administration, for example, has had an industrial relations specialist as Secretary of Labor, instead of the traditional union president or politician avowedly representing "labor's voice in the Cabinet." As a result, Mitchell has been able to act for the Administration in labor disputes and to keep a supervisory eye on "independent" labor relations agencies to a far greater degree than his predecessors. For the unions —to say nothing of management—were never content with "labor's voice" when they wanted to deal seriously with the Administration. An Arthur Goldberg is the only sort of "unionist" who could sustain and broaden this reorientation; otherwise, reversion to traditional selection risks the new usefulness of this department. Other examples could be offered: Treasury, for one, has often been a drag on State and Defense, in part because of the traditional orientation of its Secretary. A Lovett, or a Harriman, (or a David Rockefeller!) who both meets the tradition and transcends it, could make a substantial difference in the future.

Third is the effect on long-run organizational objectives — and options — inherent in the personalities and interests of particular appointees. The case of CEA has already been mentioned; so have the cases of State, the Security Assistant, and the Science Advisor. Another example is the Budget Bureau. One more cost-accountant in the place would finish it off as a useful source of staff work for the President. Especially in the sphere of national security, the personalities and interests of initial appointees at State, Defense, Budget, and Treasury *will go far to decide* what can and cannot be done thereafter by way of improving "national policy machinery."

7. Organizing for Appointments below Cabinet Rank

This is an area in which the President-elect and his whole staff could easily get bogged down at no profit to themselves ... word should be passed to incoming department and agency heads that they will make nothing but trouble for themselves and the Administration by unselective replacements or massive importations of persons at Assistant Secretary level and below. Changes should be made selectively and at leisure, using the guide line, "Know who your replacement is before you make a change."

It is no accident that in 1953 the two most effective officers in the first weeks after Inauguration Day were Dodge at Budget and

Humphrey at Treasury. These were the two agencies where there was no "purging" and where inherited staffs were told they would be treated as reliable until they turned out otherwise. Humphrey and Dodge were immediately effective because they immediately had staffs at work behind them. For a Kennedy Administration with the "Hundred Days" problem to lick, the lesson is obvious.

8. Reassuring the Bureaucracy

If one means to take the steps suggested ... above, one ought to get a maximum of credit for them from the bureaucracy. *This calls for an early public statement to the effect that government careerists are a national resource and will be treated as such* by the new regime. The reality of that intention will be demonstrated as those steps are taken. It will be demonstrated further if the working groups suggested ... above begin, informally, to draw upon the expertise of selected bureaucrats long before Inauguration Day.

The more career officials can look forward to January 20 with hopeful, interested, even excited anticipation, *the better the new administration will be served in the weeks after*. To instill negative anticipation is to cut off one's own nose to spite one's face. That was the effect in 1953.

9. Consulting with the Legislative Leadership

From Election Day on, several things should be kept in mind:

1) The Vice-President-elect will be looking for work.

2) In 1949, the new Senate leader was chosen by the Democrats just before Congress met, with the proviso that Barkley keep the post until January 20. Is this precedent to be followed in 1961?

3) Congress meets two weeks before inaugural; the Committee Chairmen—*the same faces as before* — will be looking for the "customary" laundry-list of Presidential proposals in every sphere; *in 1949, that custom helped to dissipate Truman's honeymoon*.They also will be thinking about going into business for themselves; some of them will be doing it. Finally, they will be touchily awaiting signs of recognition from the President-elect.

4) When Congress meets, the Senate liberals apparently intend another rules fight.

5) Congressional leaders will have to be consulted on, or at least informed of, the President-elect's immediate legislative plans. Their help will be needed in considering—and above all in sustaining—priorities. But consultation *with whom*, *how* above all, *when*? These questions will not necessarily look the same from the Executive side as from the Senate.

6) The first *formal* meeting with the legislative leaders, whether before or after Inauguration Day, will tend to set the form, tone, membership, and timing of future meetings. What purposes are these meetings to serve? Are they to be intimate sessions, *a la* FDR, or ambassadorial encounter, *a la* Eisenhower, with staffs present and minutes taken?

10. Giving Congress Agenda before the First Message

Hopefully, some non-controversial, simple, quick-action items could be introduced *before* Inauguration Day "on the President-elect's behalf," to "facilitate the work of the new Administration." Within reason, the more of these the better, and the wider their spread across committees the better ...

11. Establishing Liaison with the Eisenhower Administration

There seems to be no need for "general" liaison and no point in assigning anyone to do that meaningless job. Presumably, Eisenhower will suggest a courtesy meeting and briefing, as Truman did in 1952, and will offer assistance toward a smooth transition. If he does not offer, he could be asked. Once the offer is made (or extorted) it should be used to establish several *specific* liaison arrangements. These include:

1) Access for the President-elect to all

government intelligence sources and for the prospective Secretary of State to all the cable traffic he may want to see.

2) Arrangements with the FBI for prompt security clearance of appointees.

3) Access for a reliable associate of the prospective Budget Director to all aspects of the Budget Bureau's work in preparing the 1962 budget and in clearing legislation before January 20. This should be for the purpose of obtaining information, not participating in decisions.

4) Arrangements for use of Civil Service Commission staff and facilities, and for information on expiring appointments in the hands of the White House Executive Clerk.

5) Arrangements for consultation by incoming officials with their outgoing opposite numbers and with departmental staffs. No limitations should be accepted on the freedom to inquire and consult.

6) Arrangements for taking over White House offices and budget.

It may turn out that the international or economic situation requires more than a courtesy consultation between Eisenhower and Kennedy; if so, the situation should be met as it deserves, with the proviso that Kennedy need make none of Eisenhower's decisions or accept commitments carrying past January 20. *This proviso cannot be a prohibition; the situation may be unprecedented.*

The President-elect must be prepared for a variety of international complications before inaugural. What they might be and how to meet them could be studied *now* by the Nitze group.

12. Organizing for Reorganizing

Not long after Election Day, it would be well to designate the members of the President's Advisory Committee on Government Organization...

13. Setting Ground Rules for Press Conferences

The big "Press-Radio-TV," televised press conference is a recent innovation; it serves some purposes well; others badly. It does not accomplish some of the objectives served by the quite different institutions of Roosevelt's time. Whether any changes should, or could be made is open to question. It is a question worth pursuing with responsible journalists like Reston. *If changes are intended, they should be instituted at the outset*; the first press conference after inaugural will set a pattern hard to break.

14. Installing the "Shadow Government" in Washington

Very soon after Election Day, the President-elect will want to decide how fast and how formally—and in what facilities at whose expense—he wants his staff and Cabinet designees, and *ad hoc* working groups in Washington.

This automatically involves decision also on the timing of vacations *and of reconnaissance trips abroad* by Presidential designees, or by the President-elect. Shall they (or he) survey the free world? And when must they be back?

15. Preparing the Inaugural Address

It would be well *not* to begin this too early, but instead to wait until the main lines of a first message — that is to say of an initial program— had emerged. The Inaugural Address has to be a tone-setter. It will help to have a notion of what is to follow, before spending much time on this introduction. It will also help to wait until one knows what international and economic conditions to expect by January 20.

16. Arranging the Physical Take-Over

A number of troublesome details will have to be attended to. Some of them are unlikely to be settled without reference to the President-elect. These include:

1) Arranging White House office space and Executive Office building space...

17. Arranging Initial Cabinet and NSC meetings

Eisenhower surrounded these meetings with elaborate paper-work and preparatory consultations. Staffs have been

created in each department to assist with preparations and follow-up. Also, Cabinet meetings now include more Presidential aides than department heads. Somewhat the same thing occurs in NSC meetings.

It is important that none of these procedures and arrangements continues, except as Kennedy specifically desires, after a chance to get his own feel for the uses of Cabinet and NSC. Yet the first meetings of these bodies could automatically perpetuate all sorts of Eisenhower practices. Past procedures will be carried on by career staffs unless they are deliberately interrupted.

It would be well, therefore, to confine early Cabinet meetings to department heads of Cabinet rank, along with the President's Executive Assistant, and to have only such agenda as the President may choose in consultation with his personal staff. As for initial NSC meetings, it would be well to confine them to statutory members, perhaps adding the Budget Director and the Executive Assistant, while the NSC Secretary stuck to "secretarial" service, with agendas chosen by the President ...

18. Program Development after Inauguration

Presumably the first message will not have been completed, or all fights on it finished, by January 20. This will remain to be put into final form. As that is done, attention would shift to amending Eisenhower's budget, the next great action with a deadline attached around which to organize Administration planning and decisions. At the same time, it will be desirable to get study groups working, in or out of government, on the desirable projects and programs, administrative and legislative, which are not to be, or cannot be, acted upon immediately.

These three steps — completing the first message, amending the budget, getting long-range studies started — will be major items of concern for the President's first weeks in office. They represent, really, a late stage in "transition."

Like everything before, this stage should be set in awareness of possible complications from abroad. ❖

Accounting the Future

Robert B. Reich

Bill Clinton plans to spend $219 billion on educating and training Americans and on rebuilding the infrastructure of the nation. George Bush plans to cut taxes. In assessing the two plans, much of the media—along with Paul Tsongas, Warren Rudman, Pete Peterson, Ross Perot, and a group of vocal academic economists—have focused on one deceptively simple question: *Which plan will cut the budget deficit the most?* On this criterion, Clinton's proposal is obviously superior because he has specified where the revenues would come from to pay for his plan; as of this writing, Bush has not—a difference that elicited belated, if not whole-hearted, support for Clinton's plan from Paul Tsongas, among other deficit fretters. But it's safe to assume that Bush soon will be compelled to offer his own laundry list of proposed spending cuts and "revenue enhancers" (no taxes, please), regardless of how gimmicky. The moment Bush's list is released, the debate about the two plans will shift to comparative credibility: Which candidate will *really* cut the deficit the most—or at worst, increase it the least?

But deficit reduction is the wrong criterion to use in the first place when judging the two plans—not that it's unimportant, only that it's not the main issue. Economic growth is the main issue, to which deficit reduction is only tangentially related. Over the longer term, a large deficit may retard growth, but it's not the biggest drag on growth. That distinction goes to the nation's failure to invest—its failure to invest adequately in factories and equipment *and* its failure to invest adequately in education, training, roads, bridges, water and sewer systems, and the other foundation stones of a modern economy.

In accepting the Republican nomination for President, George Bush ridiculed the notion of public investment. "They call it 'investment,'" he said, "but it's nothing but the old spending in a new package." While it's certainly possible to dress up old-fashioned government spending in 'investment' attire, Bush misses the point. There's an important distinction between spending and investing, and the distinction is the same both in the private and in the public sphere. Mere spending does not increase future productivity; investing does. When the government funds criminal justice, national defense, unemployment compensation, welfare, mental health services, or farm price supports, for example, it maintains the safety and economic security of citizens here and now. On the other hand, when the government funds primary and secondary school education, worker training, and the building of roads and bridges, it enhances the capacity of our citizens to be productive in the future.

The distinction bears directly on the deficit itself. Borrowing from future generations in order to invest

in their capacities to be productive is surely more justifiable than borrowing from them in order to make today's citizens safe and happy. The former generates economic growth, which enables future generations to pay off the loan and enjoy its fruits. The latter simply burdens them, without growth. (In the late nineteenth century, the United States was far more indebted, as a portion of its national product, than it is today. But a far larger share of the borrowings was invested in canals, railroads, highways, and telegraphs—all of which spurred growth, enabling Americans early in this the century to pay off the loans with ease.)

Obsessive concern about the deficit number misses this distinction. But it represents one of the most important differences between the presidential candidates this year. Even if Clinton and Bush were to reduce (or increase) the deficit equally, Clinton's borrowing would be matched by investments in education, training, and infrastructure. Bush's would not, and never has been. (The real scandal of the budget that Bush sent to Congress last January wasn't so much the expected deficit of $351.9 billion, but the paltry sum of $133.1 billion which was to be invested, by the administration's own estimate.) This issue--the government's real borrowings from the future relative to its investings in the future--needs highlighting, not only during the present campaign but also in the future, regardless who wins the election.

How to highlight it? Public budgeting is an art form that now bears almost no relation to what the public understands its government to be doing. There are few more important subjects in public affairs than how the government budgets itself, and few so little understood by the public. By default, the budget deficit number has become a totem because the average citizen must balance a checkbook and thus easily comprehends what it means to be in debt. Inability to pay a debt provokes anxiety, for there are bad consequences; one can lose a car or a home, or worse. Moreover, the deficit number is stark, seemingly unambiguous, and it can be compared year by year—an apparent benchmark of the nation's economic and moral health. This definitiveness, and the anxiety and unfolding drama connected with it, focuses public attention like nothing else about the budget. How else to make broad judgments about what the government is up to?

In fact, the deficit and debt numbers bandied about today are just about meaningless. This year's deficit would be 30 to 50 percent higher were it not for accounting tricks adopted in recent years, such as moving agencies or bailouts off budget, accelerating revenue collections, altering the rules for distributing lump-sum retirement benefits to federal workers, and selling government assets. On the other hand, the deficit number would be much lower if the budget included surpluses in the Social Security Trust Fund, derived from all the Social Security taxes now being paid by the huge baby-boom generation. The federal government's overall debt is subject to similar ambiguities. If all unfunded future obligations (veteran's benefits, Social Security, government retirees) were included in the calculation, the debt would double from nearly $4 trillion to around $8 trillion. On the other hand, if the value of the federal government's land holdings, buildings, and facilities were included, the debt would shrink by a third to a half.

The numbers aren't to blame, of course, but neither are those who manipulate them. The numbers are arbitrary—and manipulation is easy—because there's no consensus about what the budget is supposed to measure. The public can't evaluate how the government is doing because we haven't decided what the government should be doing.

In an ideal world we'd scrap the numbers and start again. We'd ask what any family would ask about its own finances: *What do we need to know about our obligations and our investments in order to make wise decisions?* At the least, we'd decide that limits on what we spent should be

connected to what the spending was for. In a family, the prospect of sinking thousands of dollars into a child's college education would be judged differently from spending the same amount on an around-the-world cruise for mom and dad on a luxury liner. A nation's budget should be no less logical. Limits on outlays should be related to their purposes. In particular, there should be some logical connection between the generation of Americans that pays and the generation that benefits.

At any given time, the "national family" comprises what might be thought of as three generations—retirees, workers, and children (defined to include all Americans of the future). The three generations have certain obligations to one another. The national budget should remind us what those obligations are, and how well they are being fulfilled. Accordingly, the budget should be segmented into three parts, each with its own spending limit.

- Spending on retirees should be limited to workers' (and employers') contributions. We can debate how progressive this system should be, and whether (and to what extent) it should be financed on a pay-as-you-go basis, with current workers picking up the tab for retirees. But the system should finance itself (any unfunded liabilities—responsibilities to future workers which cannot be met at current levels of contributions—should be fully disclosed), and be separated form the rest of the federal budget. No dipping into other categories; likewise, neither of the other two categories should be able to raid *it* for funds.
- Spending on the living standards and safety of Americans here and now—on defense, welfare, criminal justice, farm price supports, and so forth—should be limited to tax receipts from Americans here and now. This part of the budget must be really balanced—no "accelerated" collections of revenue, no borrowing from future generations, no tapping into retirement savings, no off-budget bailouts or other hidden spending.
- The government may borrow *only* to finance investments in the future capacities of Americans to produce wealth (education, training, child health and nutrition, roads, bridges, and so on). And the borrowing and investing may rise only to the level at which the expected return on any additional investment isn't any higher than the return available to private investors on their own borrowings. The government may not borrow any more money than it invests.

These are the principles. To make them workable, we'd have to add three additional wrinkles: First, the government should remain equipped to stimulate the economy. Counter-cyclical fiscal stumulus remains sound economics, as long as fiscal balance is pursued over the long term. Thus, when the economy is sagging, the rule should be that what's borrowed can exceed what's invested—so long as borrowing and investing still roughly match over the course of the business cycle.

Second, new debt should be paid down as the nation reaps the benefits of its public investments. Otherwise, the long-term debt would continue to balloon. This would not be a problem if the debt continued to decline as a percentage of a growing Gross Domestic Product. But we should pay it off when we can. One reasonable possibility: an income-tax surcharge, triggered in any year when the economy grew faster than, say, 4 percent—the proceeds of which would be earmarked for debt reduction. Finally, the yearly depreciation on public investments should be counted as a current expenditure.

Had the federal budget been organized this way years ago, net borrowing would probably be much lower than it is today, and—more importantly—net investing

would be much higher. The public would have been alerted to growing financial burdens and declining rates of investment far sooner. Public obligations to savings and loan depositors in troubled S&Ls, for example, would have shown up in 1985, when the sum was $25 billion and the bleeding might have been stemmed, instead of 1990, by which time the crisis was draining $200 billion a year from American taxpayers. The nation's simultaneous drop in net government investment would have been clear shortly after 1987, when it was $30 billion, instead of 1991, by which time it had shrunk to a mere half billion.

A cynical response is that, while all this may sound logical, the categories and the rules can be circumvented with ease by clever budget manipulators—of which there is no scarcity the administration and on Capitol Hill. Politicians will find any possible means of placating constituents in the short run while putting off burdens and responsibilities until they can no longer be ignored. Thus, regardless of how rigidly the categories are defined, much current spending will magically be transformed into "investments," and retirement surpluses will become new sources of revenue—thus neatly avoiding tax increases and shifting the burden to future generations.

Anyone familiar with the recent history of self-imposed budget limits would findthis criticism entirely plausible. But what is the alternative? Even such seemingly air-tight rules like a balanced-budget amendment to the Constitution can be circumvented with ease, depending upon how various expenditures and revenues are defined and when they're counted. The best constraint on budget manipulation—indeed, the *only* constraint—is an informed public which understands what the budget is supposed to measure. This is precisely the problem with the system now in place. Today, the public has no idea what it should look for in the federal budget, except a trumped-up number called "the deficit." And because the public has no idea, it can't distinguish budgetary policies which legitimately lower "the deficit" from pure gimmicks which hide future burdens.

The virtue of a system such as the one I have outlined lies not so much in its logic *per se,* as in the power of that logic to enhance the public's ability to oversee government, and to assess its own priorities. Citizens understand the difference between consuming and investing, between burdening future retirees and future generations of Americans, and helping them. But if the public chooses the former, no budget can stand in the way. At best, a budget is a mirror—revealing to society its collective choices for how burdens and benefits are to be allocated among its members and between generations. Once revealed, there is no alternative in a democracy but to rely on the public's will. But until revealed, there is no real democracy. ❖

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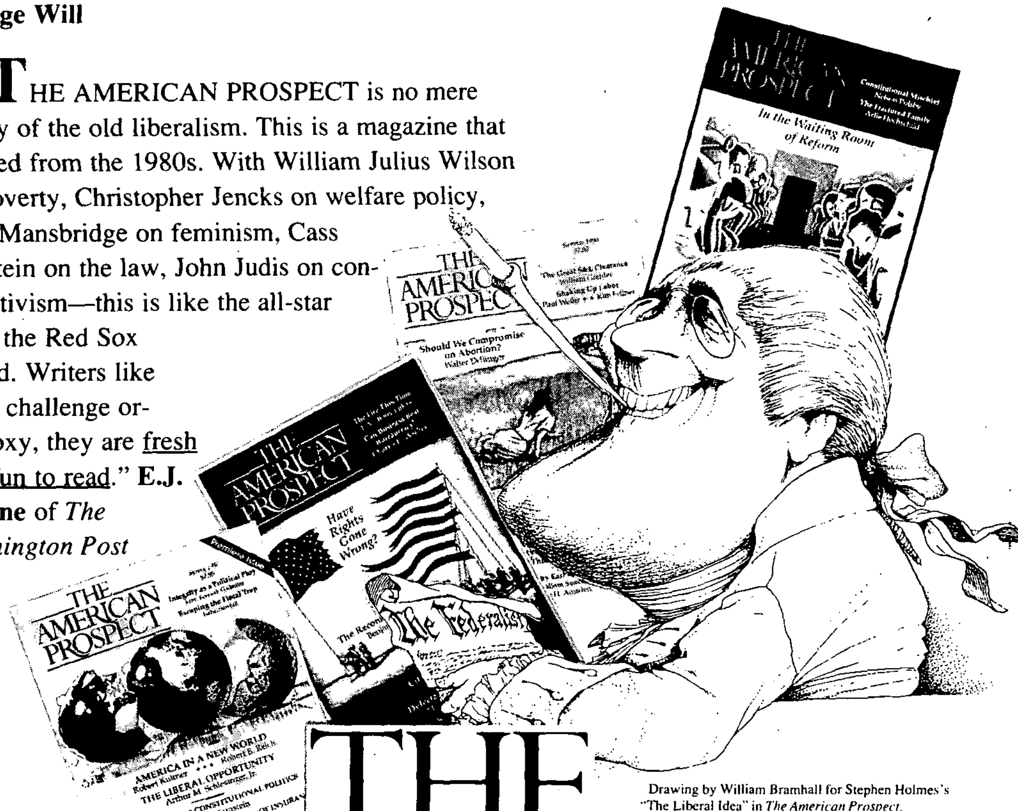

Drawing by William Bramhall for Stephen Holmes's "The Liberal Idea" in *The American Prospect*.

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The Way We Won

America's Economic Breakthrough During World War II

Doris Kearns Goodwin

America's reponse to World War II was the most extraordinary mobilization of an idle economy in the history of the world. During the war 17 million new civilian jobs were created, industrial productivity increased by 96 percent, and corporate profits after taxes doubled. The government expenditures helped bring about the business recovery that had eluded the New Deal. War needs directly consumed over one-third of the output of industry, but the expanded productivity ensured a remarkable supply of consumer goods to the people as well. America was the only country that saw an expansion of consumer goods despite wartime rationing. By 1944, as a result of wage increases and overtime pay, real weekly wages before taxes in manufacturing were 50 percent higher than in 1939. The war also created entire new technologies, industries, and associated human skills.

The war brought full employment and a fairer distribution of income. Blacks and women entered the workforce for the first time. Wages increased; so did savings. The war brought the consolidation of union strength and far-reaching changes in agricultural life. Housing conditions were better than they had been before.

In addition, because the mobilization included the ideological argument that the war was being fought for the interests of common men and women, social solidarity extended far beyond the foxholes. Public opinion held that the veterans should not return jobless to a country without opportunity and education. That led to the GI Bill, which helped lay the foundation for the remarkable postwar expansion that followed. The war also made us more of a middle-class society than we had been before.

It is no exaggeration to say that America won the war abroad and the peace at home at the same time. No doubt the historical conditions of America's economic surge during World War II were singular. But we have much to learn from that achievement as we face our troubles today.

Historians, economists, and politicians have long wondered why this remarkable social and economic mobilization of latent human and physical resources required a war. The answer, I think, is partly ideological. World War II provided the ideological breakthrough that finally allowed the U.S. government to surmount the Great Depression. Despite the New Deal, even President Roosevelt had been constrained from intervening massively enough to stimulate a full recovery. By 1938 he had lost his working majority in Congress, and a conservative coalition was back, stifling the New Deal

programs. When the economy had begun to bounce back, FDR pulled back on government spending to balance the budget, which contributed to the recession of 1938. The war was like a wave coming over that conservative coalition; the old ideological constraints collapsed and government outlays powered a recovery.

For a time the government became the purchaser of one-half of all the goods produced by the American people. A magnificent and little-appreciated fact, however, is that even though the government intervened far more deeply than in World War I—by imposing wage and price controls and surtaxes, raising funds through war bonds, rationing goods, and compelling industries to work for war production—FDR negotiated a sense of partnership rather than simply imposing the government's will.

The stereotype of FDR as a regulation-lover flies in the face of experience in the 1940s, when Roosevelt ended his cold war with business. Wartime planning was far more corporatist than New Deal planning, with far less class warfare. Eleanor Roosevelt was still much more anti-business than Franklin, and was often furious at him.

After 1940, antitrust enforcement virtually shut down. Liberals were upset that ALCOA was a big, bad monopoly. But, as Secretary of War Stimson observed, "I'd rather have more sinful aluminum now than good aluminum too late for the war." Nevertheless, the government did finance a competitor in Reynolds Aluminum, which helped to motivate ALCOA to produce aluminum and gave the government a second supplier.

Despite the entente with business, FDR was still willing to go forward on the employment of blacks and women, in part because he believed that full productivity and wartime morale required it. He also continued to advance trade unionism. He did insist, for example, that Ford Motor Company live up to its responsibilities under the Wagner Act. When Ford refused, Roosevelt cancelled a lucrative government contract. This helped to produce the momentum for the big Ford strike in the spring of 1941 that brought the first union into Ford. But on other regulatory issues FDR compromised. A government that depended on these businesses to mobilize during the war could not be slapping them with antitrust suits at the same time.

Basically, Roosevelt made the decision that he had to mobilize the proprietors of the mines, the factories, and the shops. He realized Congress could provide the money, but it could not build the planes, design the tanks, or assemble the weapons. Without the cooperation of industry, massive production would never get off the ground. So the challenge was to bring the proprietors of the nation's chief economic assets into the defense effort as active participants. He recognized also that private business could not find all the capital required for the expansion of the plants nor take the risk that the end of the war would leave them with no orders and excess capacity. So the federal government, through the Reconstruction Finance Corporation, advanced the necessary money to expand the factories, often leasing them to industry. The government developed new sources of supply for raw materials and

created quick mass transportation. The government also went into the business of producing synthetic rubber and aluminum, as well as other emerging industries, and helped stimulate new technologies.

Contrary to the stereotype of a wartime "command economy," there was a remarkable entrepreneurial spirit—in sharp contrast to the situation in Germany or in socialist, centrally planned economies. Roosevelt brought in dozens of top business executives as "dollar-a-year" men to help run the government commissions so that businesses didn't feel the government was simply telling them what to do. He allowed business to realize profits. He used government to create markets and to help business set up new plants and equipment, which business often leased and later bought cheaply after the war.

It is hard for us to imagine today how such an entrepreneurial spirit could co-exist with war mobilization, but one did. One reason, of course, was the opportunity to profit, though the wartime tax on excess profits prevented the kind of windfalls made during World War I. More fundamentally, a spirit developed within each business enterprise to produce better than its competitors to serve the country. In his fireside chats, Roosevelt explained to the people over and over again why their productive genius had to be mobilized to win the war. Buoyed by the strong morale the president fostered, business and labor worked together to get the "E-for-excellence" citations that he spread around. It was not just producing more than your competitor, it was producing more than you did the previous quarter, and the quarter before that.

For instance, Henry Kaiser's shipyards were able to get the production time for Liberty Ships down from 365 days to 92, 62, and, finally, to one day. Overall, the economy grew at a rate of 11 or 12 percent annually throughout the war.

Air Corps aces would visit the factories; the pilot would tell the workers that it wasn't the pilots who were heroic, it was their planes. The war production posters emphasized that factories and GI's were one continuous front, a theme that Roosevelt also struck in his speeches. The people understood from the start that America's dominant contribution to the war would be its production. When he was being urged by his military advisers to function more as a economic czar, Roosevelt rejected that role. The military was constantly urging him to institute compulsory national service, in which people had either to enlist or work in one of the military plants to which the government would assign them. Roosevelt successfully resisted that idea throughout the war, on the theory that, somehow, the momentum of democracy would be sufficient: If the jobs were out there, people would put their mattresses on top of their cars and go to where the jobs were. He had this extraordinary vision of the highways filled with people going south, going west. In one fireside chat, he advised people to get maps. And the Hammond company in New York sold out their entire stock of 2,000 maps in a single morning. Even though the mobilization was chaotic and there were sometimes too many people in some places and too few people in other places, it worked. And America still produced more than any other country without the regimented manpower that

some in the military wanted.

Roosevelt resisted and delayed most of the decisions that concentrated government power. For example, in the spring of 1942, when there was a rudimentary system of wage and price control, Harold Smith, his budget director, declared it was time for comprehensive controls. But the president was worried that it was adding up to an overly regimented economy, and he rejected the proposal.

In sum, one almost totally forgotten lesson of the war is that deep government involvement doesn't have to mean a command economy. Despite the mobilization, large segments of the economy were unaffected by the controls. No one was told where to move or work. Production for the government was still freely entered into by producers and government in a contractual arrangement; and business argued about those contracts all the time. Private property remained predominant throughout the country and still there were profits. In the World War II experience, the things we revere about capitalism—the parts that spur energy, efficiency, and entrepreneurial skill—were still in place. What the war did was tap that energy, not constrain it.

In the early years of the war, Roosevelt consciously pursued a conversion program to shift industry to a wartime footing. Lingerie factories began making camouflage netting, baby carriages became field hospital food carts. Lipstick cases became bomb cases, beer cans went to hand grenades, adding machines to automatic pistols, and vacuum cleaners to gas mask parts. Behind these shifts was planning; someone had to perceive the similarity between lipstick cases and cartridges. Though FDR delayed converting large consumer industries, such as autos, as long as possible, there was a clear and deliberate plan. After the war, reconversion to civilian industry, mostly carried out after FDR's death in April 1945, occurred more abruptly. But it was not without a measure of planning.

To an important degree, the Cold War served as an economic stimulus as World War II did in the early 1940s. But the Cold War has now ended, and there is not even a shred of a conversion policy. And one of the dominant lessons of World War II is that unless there is a plan for conversion or reconversion, people are subject to the whims of the free market.

Wartime conversion was not without hardships, but most of them resulted from too little planning, not too much. In 1942, after delaying, the government finally had to force the automobile industry to convert their plants to the manufacture of planes. Four hundred thousand automobile workers were thrown out on the streets until that conversion could take place. All the auto dealers and salespersons were suddenly out of jobs. Eleanor Roosevelt had an altercation with General Motors Chairman William Knudsen because he had been unwilling to accept a plan a year earlier. What made it finally work was the recognition that there had to be a plan, that the government was behind the plan, and the plan had public support. In 1992, despite all the talk about it, there is no collective effort to plan for the aftermath of the Cold War.

World War II produced remarkable social gains. At war production plants, attempts to boost morale—such as holding more softball games, and building additional canteens and health clubs—also fostered a sense of community. The logic of mobilization produced a logic of social advance.

Eleanor Roosevelt, in particular, was successful in arguing that a fully productive work force requires everyone's talents, blacks and women alike; and if women are to work in the factories, their children require day care. She proved that absentee rates were high in the factories because worried women were going home to care for their children. She got restaurants to prepare hot meals so women could bring home hot dinners. The productivity rates soared as a result of these measures.

When Henry Kaiser built his big shipyard in California, the government

paid for a twenty-four-hour child care center. It was a state-of-the-art facility with the best nursery school teachers, because it was seen as a pioneering test of early education. Workers on every shift could bring their children. If they worked at night they could bring their children to sleep. If they worked the day shift their children received an education that they had never had before. The children, especially those from lower class families, showed enormous gains. But when the war ended, all the centers were shut down. The day after the bomb was dropped on Hiroshima, the teachers got their dismissal notices.

The war broke down the long resistance to women working outside the home. In the 1930s, because of the scarcity of jobs, many states actually passed laws barring married women from working if their husbands had a job. In the Kelsey-Hayes strike of 1941, the United Auto Workers went on strike over the hiring of women for men's jobs, for fear that it would lower the wage scale. Eventually, as women were needed to fill vacancies, the UAW grasped that the answer was obviously equal pay for equal work. Unfortunately, that momentum also dissipated with the end of full employment at the end of the war.

The several facets of the wartime economy worked in tandem. The war was financed by a combination of taxes and bonds, but FDR's control of the Federal Reserve guaranteed that interest rates would stay low. Wage and price control and rationing made sure that full employment and shortages did not create inflation or hoarding as a side effect. Public investment provided the capital that the factories needed. A labor-business entente assured the absence of disruptive strikes. It was all of a piece. Government was a source of full employment, macroeconomic recovery, technological breakthrough, worker training, reindustrialization, and a good deal of incidental social progress.

Can we obtain the same benefits today, without a war? In retrospect, the war economy seems as if it were all neatly planned, and somehow inevitable. But, of course, Roosevelt was the great improviser. Some of what occurred during the war has no peacetime counterpart—the rationing, the ten million men in uniform. But much of it does. For example, we could have a great deal more public investment in technology, infrastructure, and training. We do not want or need wage and price controls, but to achieve the same restraint we could certainly have what economists call an incomes policy, tying wages to real productivity increases. We could have an excess profits tax. And if they had day care centers in war production plants in 1942, we can certainly have them today. With industry short of capital, and the banking system reeling, a new Reconstruction Finance Corporation would also be sensible.

Fifty years ago, the common desire to win the war and the feeling of revenge against the Japanese and the Nazis created a national sense of community. The first task today is to define the common problem facing the nation that requires an overarching vision.

Absent a war, the task of leadership is to create an understanding in the people of our competitive economic position in the world today. Leaders must remind the public that we still have the resources and the talent, but we must reorganize ourselves and the relationship between the government and the people just as we did during World War II.

Throughout our nation's history, there have been critical moments when the government's relationship to private enterprise had to change, allowing both economic expansion and the flourishing of democracy. Now is one of those times. The World War II experience shows just how bold that effort has to be.❖

Shopping for Innovation

The Government as Smart Consumer

Ralph Nader, Eleanor J. Lewis, Eric Weltman

According to corporate boosters, private business is the only real source of technological innovation. Just get government out of the way, and business will unleash its creative zeal. The reality is that government outlay also promotes innovation in a variety of ways. Since World War II, the government has financed roughly half the nation's research and development budget, stimulating advances in aviation, electronics, computers, medical devices, and countless other applications.

A less appreciated and potentially more significant force for innovation is the government's own immense market power as a purchaser. Federal, state, and local government purchases amount to no less than 18 percent of GNP—everything from office equipment, cars, drugs, food, energy, paper, building materials, and road pavement—totaling nearly a trillion dollars a year. Yet government seldom uses this immense market leverage to stimulate technical change.

For example, it is entirely feasible, both technologically and economically, to develop robust new markets for recycled paper, thereby eliminating massive streams of trash that otherwise would clog landfills and create environmental hazards. We can do the same to produce safer and more fuel-efficient motor vehicles, paper products without using chlorine (a serious environmental health hazard), and longer lasting road pavements that reduce motor vehicle operating costs.

In the commercial marketplace, innovators must take a gamble that a new product will find, or create, a market. The process is slow, incremental, and risky. However, government purchases can instantly create a large market, which offers producers early economies of scale, lower unit costs—and lower risks. That, in turn, makes it possible for producers to invest in innovations before a consumer market exists. The resulting products then become available to a wider public.

By mandating standards more advanced than those that characterize off-the-shelf commercial products, government can stimulate innovation even more aggressively. When officials spend taxpayer money to buy office machines, batteries, paper, or thousands of other products, they need not passively accept the choices that industry offers. Instead, they can encourage industry to produce more imaginatively. If properly deployed, the government's massive pool of organized purchasing power can jump-start the adoption of new or dormant products and technologies to promote higher productivity, greater human safety, and a cleaner environment. Although procurement cannot be a substitute

for established government regulatory authority, it can produce some of the same results and often more quickly.

Few Americans realize that government purchasing has long been a force for stimulating technological advances. Standardized clothing sizes were first introduced during the Civil War when the Union had to obtain uniforms for its troops, and these standards helped develop national markets for the clothing industry. Several decades ago, the U.S. Army gave generic prescription drug products credibility in civilian markets by buying generic for its military personnel and for Walter Reed Army Hospital, frequented by presidents and members of Congress.

As these practices suggest, most cases in which government facilitates new technologies and products by creating a market have involved the military. But there is no logical reason why only the Pentagon can use procurement to stimulate innovation. Civilian government could do likewise, though it has done so infrequently.

For example, in 1979-80, the Environmental Protection Agency's "Buy Quiet" program encouraged state and local governments to issue procurement specifications for quieter compressors and lawn care equipment. The idea was to prod manufacturers to build quieter products. Within two years, some thirty different communities issued bids for quieter products, and another fifty municipalities intended to do likewise. Much to everyone's surprise, quieter equipment cost no more than noisy equipment, and sometimes cost less—a dynamic that often occurs when governments collectively demand such innovations. Even though this program was eliminated by early Reagan budget cuts, it showed how sophisticated government purchasing could stimulate development of better technologies.

A more recent example of government using its consumer dollars to jolt an obstinate industry into action is the air bag, now a highly popular (and prominently marketed) feature in automobiles. Even though patents on air bag-related technology were first issued in the 1950s and 1960s, air bags were not available, except for some 10,000 vehicles sold with them in the mid-1970s, until the late 1980s because of the auto executives' entrenched hostility to federal safety programs.

In the 1980s, this prejudice began to crack when one of the authors persuaded the General Services Administration, then headed by Gerald Carmen, to issue a federal procurement specification for automobiles with driver-side air bags. Ford submitted the winning bid for 5,300 Tempos, which prompted the company to offer optional air bags in Tempo and Topaz models. Chrysler soon outpaced Ford with standard driver-side air bags on several models, and other companies followed the air bag bandwagon.

On the other hand, government has failed to use its influence to promote more crash-resistant cars. Although the Department of Transportation still has a National Highway Traffic Safety Administration, that agency has done very little to protect the traveling public since 1981. Procurement officials could demand that the cars they purchase have a bumper that can withstand an eight-miles-per-hour crash without damage, a body that can crash at forty m.p.h. without injury to occupants, and roofs that support twice the vehicle's weight when overturned. Such purchase specifications could move these safety features into the general marketplace.

Government as a Passive Shopper

But why are these cases the exceptions? Why are there so few other instances of creative government procurement when the potential benefits are so numerous and significant? The reasons have to do with ideological opposition, failures to set coherent and imaginative policy, the political influence of key industries, and the residual bureaucratic caution that takes over in the absence of leadership.

Except where the military is concerned,

there is a tacit presupposition that civilian government procurement should not attempt to influence what private industry does. (In the arms race, by contrast, the whole point was precisely to stimulate ever more advanced generations of weapons). As a result of this policy passivity, civilian government procurement tends to default to off-the-shelf purchases. In addition, ad hoc policy goals inserted into legislation send procurement officers contradictory signals. All of this interacts with, and reinforces, the bureaucracy's usual caution.

A good case in point is the government's generally incoherent approach to "life cycle costing"—the analysis of a purchasing decision based on the expected useful life of the product rather than its short-term budgetary impact. Congress, in fact, has repeatedly mandated life-cycle costing (LCC) in energy bills, but it has never become a government-wide practice.

For example, Charles Hulick, a career official of the General Services Administration's Federal Supply Service, reports that during the first federal effort to buy efficient water heaters using life-cycle analysis in the 1970s, he had to sign the initial contract, although he was only an assistant branch chief. His boss and others refused to sign the contract, since they were not buying the "low bid" item and thus feared future criticism.

Without regularly using life-cycle cost analysis, it is difficult for the government to be a smart buyer. LCC considers the initial cost of a product, all maintenance and operating costs during its entire useful life, and its final disposal cost. LCC encourages the acquisition of products that may initially cost more but save money over time because of reduced energy and maintenance costs. The Energy Policy and Conservation Act requires federal agencies to use LCC analysis when considering all energy-related purchases, but this is carried out only intermittently and with little support from administration officials. Federal officials needing to learn LCC analysis may find it difficult to obtain instruction. Classes taught by the National Institute of Standards and Technology are offered only four

times a year to a total of 120 participants, and many of the students are private sector employees.

Even where LCC requirements are clearly mandated, as in energy standards for construction of federal buildings, they are often waived or ignored. The Department of Justice excused itself from this requirement in a $388,883 renovation of its Washington fitness center completed in 1991, stating that the renovation was "standard construction." As a result, it did not purchase energy-efficient lighting or heating, ventilation, and cooling systems. Similarly in 1991, the National Institutes of Health (NIH) failed to conduct a LCC analysis for construction in Maryland because "the research efforts of NIH are guided by critical requirements not encountered in typical commercial buildings."

Yet another obstacle to energy-efficient buildings is the high proportion of federal office space and housing that is leased. Little attention is given to the energy efficiency of these facilities, although there is an executive order issued by President Reagan requiring leased premises to meet earthquake safety standards. In contrast, New York State requirements for energy-efficient leased buildings include window glazing, efficient lighting, and motion detectors to reduce unnecessary use of lighting.

The federal government does not even use LCC analysis for energy efficiency when purchasing office equipment, such as photocopiers, even though it pays $115-150 million annually for electricity to power office equipment. Their use also adds significantly to building cooling requirements. And office equipment is the fastest growing energy load in commercial buildings, with computers alone accounting for 5 percent of commercial energy consumption. The federal government purchases 6 percent of

Federal Procurement Policy:

Paper, alas, is perhaps the government's most abundant product, and government is the most reliable single market for paper. If the government has purchasing leverage at all, it could surely use it to generate more environmentally conscious paper production. But all too often, government has bowed to the interests of the powerful paper industry lobby.

Consider some recent efforts to procure paper bleached without chlorine. According to Greenpeace, citing studies published by three Canadian government departments, chlorine produces about 1,000 different "organochlorines," including known carcinogens and mutagens such as dioxin. Each year, pulp mills using chlorine release an estimated 400 to 700 million pounds of organochlorines into domestic waters, where they accumulate in the food chain and pose a health hazard. The Greenpeace report, "The Product is the Poison," also cites a 1988 study of water pollution in the Great Lakes linking toxic effects in humans and wildlife with the presence of 168 organochlorines there.

There are alternatives. Hydrogen peroxide, oxygen, and ozone work as substitutes, and are already replacing chlorine in New Zealand and across Europe. But the American Paper Institute (API), the industry lobby, has fought to stymie any similar conversion here. When the General Services Administration (GSA) decided to survey all paper mills in an attempt to gauge the industry's capacity to produce paper without chlorine, API tried to block the survey. When that effort failed—the survey went out, anyway—API resorted directly to its membership. In a July 1992 memo, an API official offered some not-so-subtle advice: "It is important for you to know that YOU ARE NOT REQUIRED to respond to this questionnaire in total or in part. The GSA HAS NO GOVERNMENT MANDATE requiring this information. You may want to review the questionnaire and then determine which path is best for your company." (Emphasis in the original). Not surprisingly, GSA is receiving few responses.

all U.S. computers. By using LCC analysis and requiring purchase of available efficient machines, the federal government could have a significant impact in promoting energy efficiency in office equipment throughout the country. According to studies by Competitek, an energy research institute, new technologies and management techniques could reduce total energy use in office equipment by 70 percent in the short term and 90 percent in the long term.

The federal government and all states would benefit from Washington State's example. All new schools constructed in Washington are required to complete an "Energy Conservation Report," which details energy-using systems that have the lowest life-cycle cost. The Washington State Energy Office reviews all the proposed designs. Designers must either recommend a design option within 10 percent of the lowest life-cycle cost or have the school board vote to use a less efficient option. New Mexico Governor Bruce King has proposed as part of his energy program that a LCC analysis fee be included along with the architectural and engineering fee for all new state building projects.

Federal buying decisions rarely incorporate environmental and societal "externalities"—costs and benefits not contained in the purchase price of a product or service, such as the pollution an item produces or prevents. F. Paul Blend, writing in a 1986 issue of *Harvard Environmental Law Review*, observes, "A decision not to consider external costs in itself quantifies them by setting their value at zero." Considering these externalities would set an example for the private sector, advance statutory environmental and health goals, and best serve the public interest. The environmental impacts of fossil fuels—acid rain, oil spills, greenhouse gasses—exact a severe economic price. Accord-

Must It Be a Paper Tiger?

API has also been instrumental in blocking initiatives to increase the "post-consumer" content of writing, printing, and copying paper the government purchases. Post-consumer paper is any paper that is used and then discarded—the paper millions of Americans dump in recycling bins at home, school, or work every day. But post-consumer paper is not always part of the "waste paper" used in recycled paper products. Instead, recycled paper often includes mostly "pre-consumer" paper—paper produced in the printing and production process but never actually used, such as printers' overruns or errors. Since this paper has always been exported or recycled within the industry, its increased use in recycled paper products represents no real decrease in the domestic solid waste stream.

By specifically requiring post-consumer content in the recycled paper it uses, the government could reduce the use of virgin paper. But it has not done so. In 1988, the EPA's federal content guidelines for recycled paper products initially applied to all paper products *except* printing, writing, and copying papers—those which the government uses most. And in 1989, the EPA finally announced recommendations requiring recycled printing, writing, and copying paper to contain at least 50 percent "waste paper." But the EPA included no requirement that the waste paper include post-consumer content. And some government agencies are continuing to use virgin paper.

Meanwhile, the Joint Committee on Printing—which functions as a board of directors for the Government Printing Office (GPO)—has proven similarly slow to act. Until this past March, the GPO had insisted post-consumer content wouldn't work in copy machines, even though California and Maryland have used it for ten years.

Once again, the paper industry lobby emerges as the likely culprit. API does not want government telling it what to include in its recycled paper products; it wants to make recycled paper without distinguishing between pre- and post-consumer content.

ing to the American Solar Society, the pollution associated with fossil fuels is responsible for $3 to $8 billion in annual crop losses. While recycled paper may cost more, included in the price are the external benefits of reducing solid waste and using less water and energy in making the paper, thus producing less pollution. Since the costs of the externalities are paid by taxpayers at some point, it is time to consider them when making procurement decisions.

Failing to consider life-cycle costs results in systematic discrimination against one very promising technology—solar energy. For example, while the initial cost of a diesel-powered generator may be lower, maintenance and fuel costs account for a significant portion of the life-cycle costs. Solar photovoltaic systems, on the other hand, have a relatively high initial cost, but require little maintenance and no fuel.

Solar energy is a prime example of a technology that has been retarded by government's failure to take advantage of its purchasing power. Solar cells exist, but they are still too initially expensive to compete with conventional power sources for most applications. Eventually, as the technology matures, photovoltaic cells will be more cost-effective. But they will not receive the necessary investment until industry has assurance of a market. A good analogy is the semiconductor, which rapidly coasted down the cost curve thanks to large purchases by the Pentagon.

As Subhendu Guha of Energy Conversion Devices, Inc., observes, "It is a chicken and egg story. If you want to compete with conventional sources, you have to bring down the cost to less than $2.00 a watt. If you want to bring down the cost to less than $2.00 a watt, you have to have large volume production. Who is going to buy such a large volume of production before the price comes down?"

Since the 1970s, Barry Commoner has urged the government to seed markets for solar power. Government purchases of solar photovoltaic panels would make solar energy cost-competitive with conventional fuels by speeding up the "learning curve," enabling producers to learn and economies of scale to grow. Unfortunately, Commoner's thesis was never adequately tested. For a 1991 report, Commoner studied the federal government's annual purchases for the last six years of dry cell batteries for appliances and found expenditures of about $123 million per year in 1990 dollars. If photovoltaics were used to recharge batteries for these appliances, 49.7 watts of photovoltaic capacity would be needed at a cost of $86 million, and the annual costs of operation would be $15 million. This would represent a considerable savings from the current spendings for dry cell batteries, and once again an opportunity to speed up the learning curve and make photovoltaics more cost-effective.

There are countless other uses of solar energy that are already cost-competitive or very close to it. Installing on all interstate highways emergency cellular telephones with a battery recharged by a photovoltaic array, for example, is cost-effective and would require over one million watts of photovoltaic capacity, providing another mass market and another opportunity to reduce photovoltaic costs. In California, the state has already installed 8,000 such phones on its freeways.

Legislative and Bureaucratic Confusion

The absence of coherent technology policy goals for federal procurement leaves actual policies a contradictory stew of congressional mandates and agency agendas. For example, in the military construction appropriations bill for 1991, Congress sought to stimulate renewable energy by requiring the Department of Defense (DOD) to develop a plan for installing renewable energy capacity of a minimum of 100 megawatts by 1997. The sponsors of the law were evidently eager to have the Pentagon promote photovoltaic energy systems. Yet the DOD already has that much renewable energy capacity, in the

form mostly of geothermal power. At this writing, the appropriation is being used for large-scale photovoltaic projects.

Some laws are enacted—and then ignored. A 1982 law mandated the Pentagon procure renewable energy systems where cost-effective. A 1986 survey identified 21,000 small-scale solar applications in the Navy, which would save $175 million a year. The estimated cost of installing all applications was about $100 million. No similar survey was done for the other military branches, however. Nor were such surveys performed by other federal agencies where numerous cost-effective solar applications exist, such as the Park and Forest Services, the Bureau of Land Management, and the Bureau of Indian Affairs.

Even at the Navy, despite the explicit mandate, fewer than 1,000 of these applications had been implemented four years later. According to one Navy official, this slow pace stems from the fact that two different bureaucracies are responsible for capital equipment and maintenance at naval installations. The capital team is resistant to spend funds on equipment that would reduce only the maintenance group's costs.

However, a 1989 change helps solar energy projects to compete for limited funds by allowing reduced maintenance costs to be considered in energy project applications. Much of solar electricity's savings come from reduced maintenance costs (for example, no refueling). This change, along with lower system costs and shrinking budgets, has led to increased purchases of solar devices in the military.

The political power of an industry, through its financial contributions and grass-roots lobbying, can also be a major impediment to smart procurement decisions. Consider the case of road pavement. Despite disbursements for roads by all units of government totaling $70.9 billion in 1990, roads are deteriorating faster than they can be repaired.

In contrast, while European roads cost 40 percent more, they last twice as long. A 1990 study tour of six European countries, sponsored by the American Association of State Highway and Transportation Officials, Federal Highway Administration, National Asphalt Pavement Association and others, found European roads to be far superior to ours. The study tour's report stated: "The Europeans invest more in research, development, and deployment of new pavement technology. They build their pavement foundations better....And, the Europeans maintain their pavements to get the maximum life out of them....Contracts require contractors to offer guarantees or warranties that extend 1 to 5 years after the work is completed."

There are also indirect costs of poor quality pavement—increased fuel consumption, emissions, accidents, and motor vehicle deterioration as well as inconvenience and delay to travelers. However, the investment in poor quality pavement does insure the need for frequent future repairs and rebuilding, which provide business for contractors and companies selling materials and equipment.

Democratic Congressman Anthony C. Beilensen offered an amendment to the Transportation Act of 1991 that would have allowed interstate contracts to hold construction companies responsible for the quality of the roads. The amendment passed 400 to 29, but intense lobbying by road contractors caused it to be removed in the conference committee from the final bill.

Frederic A. Lang, a former DuPont engineer, proposes a "rent-a-road" option that eliminates the need for guarantee language in highway contracts. Under his system, a contractor builds a road on government-owned land to meet the lane, traffic volume, and axle weight specifications and rideability criteria. The contractor selects the design and pavement. Rent is paid to the contractor as long as the road is open and meets the specified rideability criteria. Closing a lane for repairs or maintenance at any time results in less rent being paid; daytime closings cause a greater reduction in rent than night closings.

How Government Can Buy Smart

Unleashing government purchasing as a force for market innovation will require executive and congressional recognition of its vast potential power. We need either a presidential commission or a set of coordinated congressional hearings on the leveraging potential of the 8 percent share of the gross national product represented by federal purchasing. Environmental and consumer groups could present problems that need redressing, and entrepreneurs, including small businesses, could present new products, technologies, and designs to replace the wasteful, environmentally destructive ones currently used. Representatives from our national laboratories could discuss their research and explain how guaranteed government markets could move innovation rapidly into the marketplace. Procurement officials—not just top officials, but representatives from all levels—could disclose impediments to innovative procurement.

Congress and the president could then make technology-advancing procurement a part of the mission of all federal agencies. Agencies embodying national missions, such as EPA and the National Highway Transportation Safety Agency (NHTSA), can actively influence government procurement at the federal, state, and local levels by making their knowledge and expertise available whenever products within their purview are being purchased. For instance, in every state as well as in the federal government, there is an office responsible for the purchase of motor vehicles. That office should regularly receive from NHTSA information on safety features, beyond the present minimum standards, that can be purchased for their new vehicles. In this manner, government procurement can push the edge of the envelope and obtain safety features not yet routinely available. Top-level administrators and members of Congress should be models of initiative, using the most environmentally sound paper products, energy-efficient lighting, and safer, fuel-efficient motor vehicles.

Legislation is needed containing specific procurement quotas and compliance deadlines. Sufficient training and funding for using LCC analysis on all projects and renovations over a certain size must be enforced. Currently, enforcement of such requirements is rare, even after the occasional questions from congressional oversight committees. It is time to give taxpayers—the persons ultimately responsible for paying these bills—some voice in these matters. They should be given explicit standing to sue those government executives whose agencies do not follow laws in these areas.

The national laboratories and procuring agencies must cooperate more. Better efforts must be made to inform government agencies of the laboratories' work and how they can use such discoveries. Agencies should track and report on their progress in promoting and using innovative technologies. Outstanding procurement personnel should receive recognition to stimulate the use of procurement to benefit taxpayers, consumers, and the environment. Procurement education programs offered by universities and by relevant professional associations can focus on developing the skills necessary for more creative and prompt procurement decisions.

Exploiting the purchasing power of government would not only induce industry to use its imagination to make safer, more ingenious, efficient, and environmentally-friendly products. It would also create higher quality markets with reduced secondary or external costs to firms, the economy, consumers and taxpayers. Sound procurement policies represent change agents unburdened by ideological baggage or the resistance to command regulations. It is the big marketplace consumer saying to the marketplace sellers: here is what we want to buy—take it or leave it. Purchasing savoir faire of this scope may even restore citizens' confidence that their tax dollars are buying products that benefit them in more than one way.❖

*I*nvesting on the Frontier

How the U.S. Can Reclaim High-Tech Leadership

Michael Borrus

From the end of World War II to the late 1970s, the United States dominated new technology development through massive defense spending and the commanding lead it accumulated during the Cold War. Now the lead is gone, the defense dollars are going, and, increasingly, commercial competitors define the "state of the art." The economic benefits that accompanied technological hegemony—good jobs, wealth, national well-being—will be much harder to come by.

The United States can still pioneer technological development at home and exploit innovations that arise abroad—but only if we are willing to make the investments necessary to remain a leading player in global technology. In the past, the private sector has not accomplished that on its own, and it is even less likely to in an age of footloose multinational corporations.

Since World War II—and even before—the civilian U.S. economy has indirectly benefited from substantial federal funding of science and technology, largely for defense purposes. The record suggests that, except for a handful of highly visible failures where the government tried to overspecify commercial solutions (like the fast-breeder nuclear reactor), publicly supported industries have paid off handsomely in economic growth, jobs, and national prosperity. Some of the "winners" include the nation's leading industries in world markets, like electronics and aerospace. Indeed, according to a 1988 Department of Commerce study, five of the top six fastest growing U.S. industries from 1972 to 1988 were sponsored or sustained, directly or indirectly, by federal investment: computing equipment, semiconductors, optics, imaging technologies, and biological products. (The only exception was lithographic services.)

Yet despite the obvious success of such investment, the debate on public support remains stuck on the same old question: whether the government should be in the game of picking winners and losers. We stand to miss a historic opportunity afforded by the end of the Cold War if we continue debating what is not only necessary but unavoidable. Rather, we should focus on how to reallocate the dollars that become available as defense spending winds down. The goal should be to invest in ways that simultaneously address pressing national problems and foster the commercial technological capabilities that will sustain the American economy into the next century.

Why High Technology Matters

America's technological leadership has dwindled precipitously over twelve long years of ideological opposition to its public support. Studies from sources as diverse as

Japan's Ministry of International Trade and Industry, the National Research Council, defense and nondefense agencies of the U.S. government, the European Community, and private-sector business groups reach the same general conclusions: The number of commercial technologies in which the United States has a clear lead over Asia and Europe has dropped sharply during the last decade, a clear reflection of the fact that, as a percentage of gross national product, the U.S. now spends about half as much developing commercial technology as Japan and Germany do.

Even in the aircraft industry, a major stronghold of U.S. high-tech competence, Europe has reached technological parity, and significant advanced production activities are migrating from the U.S. to Asia. This loss of technological position and the post-Cold War cut in public funding have significant implications for the long-run performance of the American economy. Even economists skeptical about public support to commercial technology development admit that technological progress fuels economic growth and that research and development (R&D) fuels technological progress. In fact, at least one-quarter and perhaps as much as one-half of the total growth rate is attributed to advances in technical know-how.

To paraphrase Richard Darman's smirking dismissal of high technology, a dollar's worth of potato chips may indeed be the equivalent of a dollar's worth of silicon chips for the nation's trade balance. But the two are not equivalent for many other determinants of economic well-being such as employment, wages, skill formation, productivity, investment, and research. Indeed, ideological apologists aside, there is emerging a bipartisan consensus that industries can be strategic to economic welfare in one of two ways: by providing a higher return than the same labor, capital, and other inputs could earn elsewhere or by providing spillover benefits for the rest of the economy.[1]

High-technology industries are strategic in both ways. They fund a disproportionately large amount of industrial R&D—nearly 60 percent—offering innovations and skills that spill over to the economy as a whole. These spillovers, acknowledged by most economists to provide broad social benefits, are embodied in, for example, basic scientific breakthroughs with myriad applications as well as trained people capable of starting new enterprises. Studies show that as a result of spillovers of all kinds, the social returns to R&D spending far exceed the private returns—perhaps by as much as 50 percent to 100 percent above the return to ordinary capital.

High-tech industries also make disproportionate contributions to the nation's creation of high-skill, high-wage employment opportunities. High-tech industries account for only 18 percent of total manufacturing employment but at least one-third of the employment of scientists and engineers. High-tech industries are also high-productivity industries that pay higher compensation than other manufacturing industries. In 1989, the average value added per worker in all high-technology industries was one-third higher than the average for all manufacturing and two-thirds higher if only production workers are included.

The Technology Stakes

What do computers, supersonic transport, biotechnology, synfuel plants, jet engines and airframes, and the fast-breeder nuclear reactor have in common? All have received, directly or indirectly, intensive public investment and other kinds of public support. With the clarity of hindsight, we can also name the commercial winners and losers.

The winners—computers, biotechnology, jet engines, and airframes—were each the by-product of public spending for national defense and public health, under that

1. This and the following data are drawn from Laura Tyson, *Who's Bashing Whom: Trade Conflicts in High Technology Industries* (Washington D.C.: Institute for International Economics, forthcoming, 1992).

old-fashioned (pre-Reagan) image of government serving the common good. These industries are today leading high-tech sectors of the economy and strong sources of comparative advantage for the nation. More often than not, the public contribution to their success has been discounted, forgotten, or ignored as politically and ideologically inconvenient to the exercise of private power.

The losers—supersonic transport, synfuels, and the fast-breeder reactor—were each an attempt to fund directly commercial development of a specific product with public money. They were bigtime losers, and the public support that nurtured them is usually very well remembered by opponents of government technology policy. Unlike private investors who focus on the winners, the political debate on govern-

ment investment obsesses over the losers.

Federal support to new technology crystallized after World War II around national defense, nuclear energy, and, later, space exploration. The spending model was premised on belief that pouring the investments into science at the front end of the development pipelines would produce technology out the other end. Initial applications were developed for the military; later they would spin off into commercial use. In this way, U.S. defense spending promoted the rapid development of a host of military technologies that eventually found widespread success in commercial markets, including jet aircraft and engines, silicon chips, computers and operating systems, complex machine tools, data networks, data compression, optoelectronics, and advanced ceramic and composite materials.

In these cases, government underwrote the relevant basic science research at universities and labs, direct R&D contracts accelerated the development of the technology, and defense procurement at premium prices created a strong initial launch market. A variety of mechanisms, ranging from patent pooling and hardware leasing (machine-tool pools, for example) to loan guarantees for building production facilities, helped to lower market entry costs, to diffuse technology among competitors, and to set the stage for commercial market penetration.

The government provided full-blown support in other sectors, notably for public health (and broadly for science research via the National Science Foundation). Massive government funding for biomedical research and training research scientists followed World War II successes in developing penicillin and other pharmaceuticals. Commercial winners have ranged from treatment regimes, drugs, and medical equipment to biotechnology.

The key to the successful cases seems to have been a development process that met the requirements of the commercial marketplace. Thus when the military pushed silicon-chip design and manufacture toward high reliability, miniaturization, high performance, and low costs, it was creating a trajectory that the commercial computer industry could ride. Similarly, when the Defense Department turned to the scientific community to help define the characteristics for ARPANet, its internal electronics communications system, it was launching a data-networking trajectory that would also meet that community's commercial needs.

In that sense, the U.S. government's direct R&D sponsorship has probably been less important for commercial success than its procurement and indirect support, since the latter policies acted to diffuse the fledgling technologies into widespread use. It is important to note that this strategy of public support was not a simple stepchild of the technological successes of World War II. For example, government support to aeronautics predates the war, beginning in earnest with the creation of NASA's precursor, the National Advisory Commission on Aeronautics, which was a vital source of the R&D and testing during the 1920s and 1930s that led to the modern passenger airliner. Of course, that was in the days when we were still willing to be public risk-takers, before the ideological purity set in—when government acted rather than believed it shouldn't.

In fact, some of the grandest and most successful experiments in public support to commercial technology occurred back then. RCA, a consortium among the Navy and several corporations, including General Electric and United Fruit, grew out of Woodrow Wilson's concern about Britain's dominance of radio technology. But arguably the most successful program of public support to commercial innovation is the Agriculture Research and Extension System. Dating from the Morrill Act in 1862, the still-evolving system—comprised of land-grant colleges, state experimental stations, and other federal and local instistutions—has provided education and training, long-term R&D, and new technologies

to America's farms. Although not without controversy (its neglect of organic farming methods, for example), it is still widely credited with a major role in making American agriculture the world's most productive.

While such successes are suggestive, there is as much to learn from the failures. The defense-energy-space nexus provides robust examples that range from outright flops like the supersonic transport (SST), synfuel plants, and the fast-breeder reactor, to more complex and ambiguous cases like the development of numerical control for machine tools, the Space Shuttle, or photovoltaics. The Air Force, for example, sponsored the development of numerical control technology for machine tools to build advanced aircraft. But the programming language proved too complex for general commercial use; diffusion was slow and civilian application costly. The resulting development path produced a commercially vulnerable U.S. industry that was squeezed by Japanese competitors from the cheaper end of the market and German firms from the more expensive end.

Similarly, the more visible failures moved down technology trajectories that were commercially unacceptable for a variety of reasons. The commercial airliner market was aiming at short-haul and wide-body planes rather than supersonic speeds. The fast-breeder nuclear reactor and synfuel programs were much more expensive than commercial alternatives, particularly after the oil shocks abated. In each case, developers construed performance objectives too narrowly and failed to explore alternative technological paths. Demonstrations and pilots proceeded despite experimental evidence of failure. In other cases, like photovoltaics, political considerations killed development prematurely.

In short, public support for technology runs into trouble when it proceeds down development paths that diverge from commercial market requirements, particularly when it overspecifies an exotic technical solution in the form of a particular product. (Even in those cases, however, there are likely to be important technical spillovers, especially when the program funds generic research.) Those requirements—including manufacturability and customer-defined cost and performance standards—should not be hard to build into future programs, particularly if a peer-review model is adapted to include potential commercial producers and users.

Market Imperfections

Though history shows that public investment in commericial technology can pay off, the question remains: Why can't the private market provide the necessary support? There are two kinds of answers.

First, several so-called imperfections underlie the market's failure to invest adequately. Innovators cannot appropriate all of the returns on their investment. Often, they cannot foresee sufficient returns to justify proposed R&D. Conversely, because of strong intellectual property protection, firms often engage in redundant R&D. The combined effect on the system as a whole is overinvestment in some technologies and underinvestment in others.

Second, innovation is contingent on the decisions and actions of many groups—developers, producers, and users—and thus unpredictable. Different firms evaluate risks differently, apply different capabilities to their technological effort, receive different signals from their customers, and go down different development paths. That is how Sony and JVC/Philips developed two quite distinct formats, Betamax and VHS, for the VCR, and why there are at least thirty industrial approaches to making flat, high-resolution computer displays.

In essence, technology development is a "path-dependent" process: where you end up depends on where you start and want to go. Technical progress involves insights that materialize only through experience in development, production, and use. Rather than being preordained by scientific logic,

then, technology development is contingent.

Contingency means that some firms will go down the wrong path, betting on, for example, dedicated word processors rather than personal computers. Others will start down the right path, misevaluate the potential, and abandon the effort. Consider Xerox's famous Palo Alto Research Center, which pioneered many innovations in desktop computing, including workstations, icons for user interface, and the ubiquitous "mouse" pointing device. Yet other companies, not Xerox, successfully exploited these innovations, just as Japanese firms successfully commercialized the U.S.-developed technologies underlying VCRs, camcorders, and miniature flat displays.

Contingency also means that neither innovators nor the private capital markets that fund them are fully capable of evaluating the risks involved. Some bets will pay off big; some not at all. There will always and must always be winners and losers, but they can only be identified in retrospect.

This is as true for private as well as public investment. For every Macintosh, there are several Lisa's (an early flop from Apple). For every IBM, there are several GE's and Westinghouses whose technological bets on mainframe computers failed to pay off. For every Intel, there are assorted, now-defunct Molectros and Qualidynes. For every winner in a venture portfolio, there are untold losers that get nowhere near the publicity.

There is absolutely no evidence beyond the economist's leap of faith that private investment is any more capable than public investment of separating the winners from the losers before the fact. (The major difference, of course, is that private losers exit the market, while publicly backed losers are held to the higher standard of wasting taxpayers' money.) And as Princeton economist Gene Grossman argues, the magnitude of the potential social gains from public spending are sufficiently large to provide a comfortable margin for error in choosing among technologies to back. Thus picking winners and losers is the wrong metaphor to characterize the socially useful and necessary activity of government in supporting that process. Innovation is a gamble. But through public spending, government is actually placing bets to ensure there will be at least some winners for our collective future.

The Inevitability of Public Support

There are a range of social needs—from national defense to infrastructure provision—that private investors simply will not effectively support because the risk is too high, the payoff too small, or the market too unsuitable. As it goes about providing for these common needs, the government becomes a significant consumer of technology in its own right. Like any other large customer and lead user, the government must pay to get the technology it needs. Very often that means sponsoring research and procurement that launch new industrial capabilities. As we have seen, such sponsorship and procurement often pay off indirectly in the development of commercially successful technology.

New technologies and industries tend to develop in a particular location—Silicon Valley, for example. Such regional patterns are evidence of what economists call "local externalities." These externalities can take several forms, including the availability of a specialized pool of labor, specialized supplier networks, and a common knowledge pool through which firms can learn from each other. Local externalities tend to have a self-reinforcing effect—regions or nations that have a strong presence in a particular industry tend to generate the specialized inputs and informational networks that in turn make the industry even more competitive over time.

Although local externalities are not unique to high-technology industries, they have special relevance for them. Recall that technology development paths are strongly characterized by learning. Some such knowledge is footloose, that is, embodied in products, blueprints, or open technical

forums like published journals. Other knowledge is, however, developed only in conjunction with development and production. That kind of knowledge accumulates in the specialized local assets like labor pools and supplier networks. It is embodied in them and does not diffuse easily.

When Apple goes to Sony to develop the portable Mac Powerbook, when Compaq goes to Citizen for the LTE notebook, when IBM moves microsystem development out of the U.S. to Japan, these American companies are seeking access to precisely such specialized local Japanese assets—in this case, embodying know-how in components and microsystems design and integration. Such local capabilities are the probable basis for product differentiation and new technology generation. They help to attract footloose technological know-how from overseas and to exploit it domestically. In other words, technological progress is intimately bound with local capabilities. Unless these capabilities exist, an economy has no enduring potential for operating at the technological frontier, with all that implies for maintaining national well-being.

Not surprisingly, other industrial nations have recognized this aspect of technological advance. They know that if they organize their economic systems appropriately and underpin them with an aggressive mix of trade and industrial policies, they stand a fair chance of having the economic benefits of high technology accrue locally rather than abroad. This was the case with Japan's coordinated effort to dominate microelectronics and with Europe's Airbus consortium. Taiwan's proposed stake in McDonnell Douglas in return for transferring 60 percent of subcontracted production activities to Taiwan is only the most visible example of this common practice abroad.

Whether through intention or effect, the local and national concentration of technological benefits means that high-tech competition can take on an inherently beggar-thy-neighbor cast. A bigger national share of global high-tech output can mean a bigger national share of good jobs and greater economic prosperity. That is why technology-intensive industries are the source of growing trade friction between the U.S. and its competitors. As high-tech industries have become steadily more important to the economic performance of the developed countries, those countries commit to maintaining a local high-technology production base by leveraging both policies and structural differences in national economies (for example, the difficulty of Japanese market access).

Absent U.S. government support to domestic technology, national economic systems will interact in ways that tend to redistribute advanced technological activities and their benefits from the U.S. to other countries. We will pay a huge price (measured in loss of high-paying jobs, a contracting tax base, declining local communities, and slower economic growth). We will end up poorer. And it matters not at all whether this outcome is intended or simply the effect of competition between differently organized political economies.

The adjustment problems that follow for the U.S. make government support to commercial technology inevitable. Such support can be reactive later at great cost. Or it can be proactive now, aiming to nurture what we know and extend it in ways that address collective needs. If the government must act, how should it act to maximize the likelihood of a positive payback?

The Payoff

A decade ago, in their book *Government and Technological Progress*, the economist Richard Nelson and his colleagues provided three recommendations for public support to innovation that still hold.

> One is to associate government R&D support with procurement or other well-defined public objectives. A second is to define and fund arenas of non-proprietary research and allow the appropriate scientific community to guide

R&D allocation. The third is to develop mechanisms whereby potential users guide the allocation of applied research and development funds.

Just three additional points need to be added to those simple guidelines.

First, any "well-defined public objective" ought to have two characteristics. It should be an area of clear common need for national well-being, and where possible, addressing that need should remove an obvious constraint on future prospects for long-term economic growth.

Second, when funding moves from generic, nonproprietary R&D toward applications, four conditions should prevail: research should pursue alternative technological approaches until the best development path is demonstrated; wherever possible, development must incorporate commercial criteria, such as cost, performance, and manufacturability; within those constraints, leading-edge innovation should take precedence over low-tech solutions to promote high-tech capabilities, which pay higher wages; any resulting technology should first be commercially exploited in the U.S. to ensure that the competencies and production activities accrue locally. (After all, if the government is paying the bill, it is entitled to domestic production, even in an age of multinationals.)

Third, and perhaps most important, public support should actively pursue diffusion of new technologies into widespread commercial use within the domestic economy. Aside from the emphasis on commercial market criteria during application development, there are four ways to accomplish this. One is through incentives like investment tax credits or leasing arrangements tailored to encourage early adopters. A second is through education and training. Many of the industries successfully launched through public sponsorship drew from a labor pool trained in the new technologies through federal support. In effect, a supply of new skills shaped demand to fit its characteristics, rather than the reverse.

A third way to accomplish diffusion is by embedding new technologies in public infrastructure wherever possible, thereby making their benefits universally accessible. A fourth way is to adapt the agriculture extension model to industry. The aim would be to assist the small and medium-sized businesses that underpin local and regional economies in effectively adopting new technologies and methods of production. There is already an elaborate network of state agencies that play this kind of role, often in conjunction with local educational institutions attuned to the needs of local business. Minimal federal funding could help build this network into an effective national industrial extension service and link it to publicly sponsored innovation.

With only marginal effort, these guidelines could be applied to existing federal support of science and technology. But we can go further. Let's imagine redirecting several billion dollars from defense to new commercial technology development. Using existing work on critical technologies as a point of departure, the Office of Science and Technology Policy (or perhaps the National Security Council) would invest one-third of the total on nonproprietary research in the sciences underlying the critical technologies, subject to review by the NSF or the National Academies.

Another one-third would be directed to diffusion, via incentives, training, infrastructure, and extension. This spending would focus on existing technologies like those for flexible manufacturing. This funding could also help move critical technologies out of the lab and into manufacture. For example, demonstration products might be funded or loan guarantees provided for building volume production facilities where private capital markets were known to balk.

The last third would go toward specific nondefense public objectives, where investment is likely to remove constraints on future economic performance. Guided by both technological and commercial market considerations, the resulting technologies

should be capable of broad and rapid diffusion into the economy. As serious candidates, consider the following:

The Environment. No matter how much they are opposed by industry, global requirements for ever more stringent environmental cleanliness will not be moderated. But neither are consumers likely to adjust their demand for jobs and goods according to what is environmentally sustainable with today's technologies. These environmental and economic needs can be treated as antithetical, the position President Bush advanced at the Rio Summit in July. Perhaps ultimately they are. But it is surely an appropriate public responsibility to explore whether they can be reconciled.

There are several opportunities that go beyond conventional programs in waste reduction, cleanup, and recycling. The effort should be directed to replacing existing industrial production with technologies that generate no waste or pollution in the first place. If American's manufacturing stock can be rebuilt around clean production technologies, the economic possibilities for the next century are wide open. New U.S. industries to supply the technologies would develop, while established industries that adopted the technologies would have a strong new source of competitive advantage in environmentally sensitive world markets.

Energy and Natural Resources. Almost across the board, American industries are among the least energy- and resource-efficient producers in the industrial world. If there is motivation to develop the appropriate technologies, dramatic resource efficiencies are possible, as Silicon Valley firms discovered when they reduced their water usage during the last six years of drought.

A good beginning would be to study the energy and resource use of major industries like electronics and to evaluate resource-efficient technologies already used abroad. Both tasks are ideally suited to the national laboratories. Once opportunities for improvement are identified, competitive contracts could be offered to develop the necessary technologies, and investment incentives could promote rapid adoption. Again, new technologies to help sustain resources and enable efficient use would spin off entirely new industries while boosting the competitive position of existing ones.

Infrastructure. There is widespread agreement that much of the nation's networks for transportation, power, sewage, water, and communications are eroding and need to be rebuilt. Anyone who has operated a business where the infrastructure is lousy—say, the phone networks in Eastern Europe—knows the damage it wreaks on efficiency. Providing modern infrastructure would stimulate not only productivity but also innovations, from low-maintenance structural concretes to optical networks, to take advantage of the new infrastructure.

The additional opportunity here would be to fashion new infrastructure that uses emerging critical technologies of the next century—new materials, visual systems with flat-panel displays, real-time electronic controls—and then to support the development of commercial, domestic capabilities in them through nationwide procurement.

With military spending and the resulting technological and economic benefits it generates declining, these long-term needs are likely to provide the next frontiers of American technological innovation. More than technological preeminence is at stake. Historically high growth rates, competitive wages, and a growing standard of living—all depend on regaining leadership in commercial technological innovation. For twelve debilitating years, the government has refused to invest in America's commercial technology position. It's high time to revive public support and set it to the task.❖

The Pork Barrel Objection

Steven Kelman

Critics of public investment often suggest that, however strong the case for such outlays might be in theory, the realities of American politics make the proposals a bad idea in practice. In particular, critics argue, efforts by members of Congress to obtain "pork barrel" benefits are likely to destroy any chance that public investment programs can be effective.

Pork barrel worries are of two sorts. One is about location. Rather than being guided by a sober evaluation of where projects should best be located or who can best undertake them, decisions will reflect the demands of powerful members of the congressional committees authorizing the projects or of legislators whose support was obtained by making promises about the project's location. A second fear is that once a project has gotten started and jobs are at stake, it will be difficult to shut down a white elephant investment.

The pork barrel objection is an application of what economists call the "theory of government failure." Traditional economic theory discussed "market failures," where the operation of free markets does not produce optimal economic outcomes. The suggestion was that it was an appropriate role for government to act to remedy such failures. More recently, however, economists associated with the theory of "public choice" (which applies economic models to the behavior of government) began to argue that one should not compare how markets function in practice with how government peforms ideally. For, it is noted, there are systematic sources of "government failure" just as there are systematic sources of market failure. Government action might still be unjustified, these economists say, despite the presence of market failure, if the costs of government failure outweigh those of market failure.

It would be foolish not to take the pork barrel objection seriously. Certainly, members of Congress care about the location of federal projects in their districts, and they worry a great deal about anything, including cancelling a government project, that will cost jobs back home. And one can certainly point to public investment projects, such as the Clinch River Breeder Reactor in the 1970s, where pork barrel considerations have been important.

Yet the pork barrel problem need not doom public investments to ineffectiveness. There are, in practice, important examples of government support for technology where pork barrel considerations do not play much of a role. The National Institutes of Health award large medical research grants, and the Defense Advanced Research Project Agency gives out large sums for high-tech research, with little pork barrel intervention. (There is some legislative earmarking for specific projects, generally driven by pork barrel considera-

tions, but it plays a small role in these agencies' budgets.) Agencies throughout the federal government routinely award competitive contracts for providing computing products and services running into the hundreds of millions or even billions of dollars. Whatever one might say about the quality of the procurement process that backs up those decisions (and, in my own research on computer procurement, I have been quite critical of the process), it has never been suggested that those decisions are driven or even influenced by pork barrel considerations.

The pork barrel problem is worrisome, but it need not be fatal, especially if one pays attention to the design of programs and institutions involved in public investment projects. Herewith, some suggestions:

First, in statutes establishing public investment programs, Congress should create an institutional mechanism for decisions about project selection and ongoing funding that keeps future congressional involvement with the specifics to a minimum. Examples of such mechanisms include funding based on evaluation of competitive proposals by relevant agency officials using the procurement process, which is quite insulated from congressional intervention, or some version of peer review by nongovernmental officials.

Some will say that such a proposal for congressional self-denial is either utopian (Congress will never do it), or wrong (it is undemocratic), or both. But the proposal is not utopian. It is already the model used in some programs of this sort. And, as a general matter, more frequently than one would imagine Congress has indeed been willing to tie its own hand in advance out of the fear that, if it does not, it will produce what congressmen know to be bad public policy because they will find it impossible later on to resist pork barrel considerations.

The self-denial mechanism is thus analogous to the dieter who locks the door in advance to protect himself against the temptation to raid the refrigerator in the middle of the night. For example, Congress established a blue-ribbon commission to determine military base closings, whose conclusions Congress could then overrule only on an all-or-nothing basis, exactly because of worries about pork barrel objections to individual closings. Congress has adopted automatic indexing for Social Security benefits, even though indexing takes away opportunities members would otherwise gain to take credit for annual benefit increases, for fear that the constituency pressures for irresponsibly large increases would be too great.

Furthermore, keeping Congress out of selection decisions is not undemocratic, since any self-denying decision about institutional design would itself be made democratically. Indeed, it would be undemocratic to *forbid* Congress from creating such mechanisms.

Second, the pork barrel literature suggests that the best time to worry about issues of institutional design is at the inception of a program. Linda Cohen and Roger Noll argue in *The Technology Pork Barrel* that pork barrel dangers are most intense once actual projects are up and running; at that point, they have created actual rather than merely potential jobs, which would be lost if a program is shut down. Questions about benefits and costs have the greatest political weight, they maintain, during initial debates about whether to establish the program at all. Similarly, pork barrel considerations are least likely to influence issues of institutional design if they are raised and resolved before a penny is spent.

Third, chances of avoiding pork barrel problems are greatest for programs where the size of individual investments is quite small or where it is quite large, and the chances are worst for those with project sizes in between. When individual investments are small, members of Congress have little to gain from getting the program located in their district or inappropriately continuing funding. Cohen and Noll's data on congressional voting on technology pro-

jects show that when benefits to a district are low, pork barrel considerations do not sway member votes. And when the size of individual investments is large, the issues involved are likely to be of higher budgetary, media, and ideological visibility. In those cases, ideology and party affiliation matter more than pork barrel considerations. The higher the visibility of an issue, the more likely pork barrel considerations will be overwhelmed by more general policy concerns.

Finally, we need to take the admonition of the theorists of "government failure" that the costs of market and government failure be compared more seriously than they themselves often take it. Just as they criticize earlier generations of economists for automatically assuming a case for government action once a market failure has been identified, there is some tendency among public-choice theorists to assume that government action is *unjustified* once they have identified the presence of government failure. But if a certain project is plausible enough, it may be worthwhile to undertake, even with some pork barrel costs. As political scientist R. Douglas Arnold has written in a slightly different context, "The question of where a few thousand office workers will be located is usually secondary to the issue of exactly what they will do." If a program is good enough, it may not be the end of the world to have the work for it located in the district of the chairman of the program's authorizing committee. The costs, of course, are greater if one believes with a high degree of certainty that pork barrel politics will make it impossible to cut off expensive failures. The point is that likely pork barrel costs should be compared with the potential benefits of projects on a case-by-case basis.

It is a mistake to reject public investment projects out of hand on the ground that pork barrel politics will inevitably doom them to wastefulness. But to avoid that danger, advocates of public investment need a strategy not only for the substance of the programs they advocate but also for their institutional design.❖

Conversion to Competitiveness

Making the Most of the National Labs

Jay Stowsky and Burgess Laird

For nearly fifty years, U.S. military superiority has depended on American technological preeminence financed through public spending by the national security establishment. At the peak of the Cold War during the 1980s, the Pentagon, the Department of Energy, NASA, and the intelligence agencies together spent more than $60 billion a year on defense-oriented research and development—nearly two-thirds of all government-funded R&D outlays during the Reagan years.

This public investment didn't just build weapons. It created a technical archipelago of immense value, whose crown jewels are the three national weapons laboratories at Los Alamos and Sandia in New Mexico and Lawrence Livermore in California. With the Cold War over, the national labs will either be gradually defunded as relics or reborn as civilian technology centers of development.

Today America's commercial technology base is eroding in the face of stiff, government-assisted competition from foreign firms. This erosion does not stem solely—or even mostly—from exchange-rate imbalances, low rates of domestic savings, wage-rate differentials, or the process of industrial followers inevitably "catching up." Most of America's competitive problems are structural. Primary among them is the country's overreliance on defense-driven technology—a strategy sufficient to win the Cold War but not to prevail in the commercial arena.

To meet this competition, the U.S. needs to formulate an explicit, civilian-oriented technology policy. In one sense, the U.S. is lucky that it already has the national laboratories in place. If they didn't already exist, the United States would have to create them. Yet the traditional military rationale for the labs, as a special exception to a general dogma of laissez-faire, makes it difficult to broaden their mission.

Under a new policy committed to the support of commercial technology the weapons labs would be one instrument among many in a national competitiveness strategy (see "Investing on the Frontier," by Michael Borrus, p. 79). They would facilitate innovations American companies would not make if left to draw on their own resources. Adding public to private resources, they would encourage investment in technologies that reflect a new definition of national security embracing environmental as well as defense concerns.

Beyond Test Tubes

Ever since J. Robert Oppenheimer led the Manhattan Project at Los Alamos, beginning in 1943, the national labs have benefited from enormous investments in human and physical capital. Today they

employ approximately 27,000 scientists and technicians. They have a capacity, rarely matched in privately owned industrial laboratories, to undertake costly basic and applied research aimed at long-term payoffs. Although the weapons labs are owned and financed by the U.S. Department of Energy, they are operated by contractors. Los Alamos and Livermore are run by the University of California and Sandia (until October 1993) by AT&T. Compared with government-operated institutions, contractor-operated labs provide an unusual measure of intellectual freedom and flexibility. The resulting university-like environment has helped the labs to attract and retain top-quality people.

The word "laboratory" conjures up images of white-frocked scientists mixing chemical concoctions in test tubes and conducting arcane basic research. In fact, the national weapons labs are highly applied, "mission-oriented" organizations. Building a nuclear weapon is, after all, a manufacturing enterprise that requires concrete problem-solving in theoretical and applied nuclear physics, computer simulation, metallurgy, precision fabrication and testing, as well as actual production. At the weapons labs, interdisciplinary teams of scientists and engineers solve design and manufacturing problems as concrete as those at any consumer products company. The labs also deal with safety-related technical problems involving weapons manufacturing, transportation, and storage.

Though the labs have been used primarily to design and develop weapons, their use for nondefense purposes has fluctuated over the years. At the high point of the perceived energy crisis of the 1970s, the laboratories devoted nearly 50 percent of their budgets to energy research. During the Reagan years, the research priority shifted back toward weaponry. Today about 25 percent of the laboratories' budgets finance nonweapons research emphasizing energy and the environment. The labs are housed in the Department of Energy because it was the successor to the old Atomic Energy Commission, which was in charge of nuclear weapons and later nuclear energy under Eisenhower's "Atoms for Peace" program. But thanks to their practical experience with a variety of advanced technologies, the labs have also made significant contributions in fields such as diagnosis and treatment of cancer and AIDS, development of new structural materials, hardware and software advances for supercomputers, and techniques for sequencing the human genome (see "Chips With Everything," p. 94).

As the labs' primary mission—nuclear weapons—recedes, at issue is just how they should contribute to basic and applied commercial research. In government policy circles, three main approaches are being debated. The first, espoused by many in the Departments of Defense and Energy, asserts that the labs should continue to focus exclusively on their defense missions. A second approach concurs that the labs should focus on defense, but argues that the defense technology base itself requires the labs to promote more civilian technology. A third, more radical, proposal would convert at least one of the three laboratories, presumably Lawrence Livermore, into a research center for civilian technology.

These are not the only possibilities. Other options include the wholesale dedication of separate (and perhaps new) national laboratories to the solution of particular problems, such as a National Environmental Protection Laboratory or a National Energy-Efficient Transportation Laboratory. We sympathetize with these aims, but the history of the national weapons labs suggests the particular value of interdisciplinary institutions with multiple missions. The weapons labs have shown a capacity for flexibility and technological serendipity that would be lost if they were converted to single-purposes. The challenge is to broaden their franchise so that the labs can anchor a renewed national commitment to high-tech research and production generally.

Spinning a New American Technology Policy

There is nothing new under the rising sun. Well before Japan devised its famous industrial policy, the United States had industrial and technology policies for its emerging sectors. These policies were largely dictated, however, by the nation's military needs. In fact, most of America's high-technology success stories—including aircraft, semiconductors, telecommunications, and computers—trace their origins to government efforts to promote technologies for national security. Sometimes, the federal government even fostered civilian markets for essential military products—for example, providing postal routes for aircraft during the 1920s—so that defense contractors would not disappear or lose their technological edge for want of markets during peacetime.

The commercial benefits of America's defense-driven technology development strategy were pervasive if unintended. Pentagon research funding, development projects, and procurement expenditures provided four crucial functions not found sufficiently in private industry: patient capital; a mechanism for collaborative research; high-volume "launch markets" for new products and production processes such as integrated circuits and computer-controlled metal cutting tools; and rapid diffusion of the latest technologies.

The United States has spent billions of dollars on agricultural extension, but almost nothing on industrial extension. However, military technology has been the closest American equivalent to a technology-diffusion policy. Military requirements for domestic second sources on major weapons contracts, along with the extensive use of subcontracting, ensured rapid and widespread diffusion of new production equipment and materials, fostering further rounds of manufacturing and design innovation. All of these led to essentially unintended "spin-offs" that had commercial uses.

But lately, as military technologies have become more rarified, the possibility of easy spin-off has diminished. Military-oriented companies have come to exist in their own distinct subculture. Over time, narrow military performance requirements, along with byzantine procurement regulations and national security restrictions on exports, have isolated the defense sector of high-tech industry in its own ghetto.

Paradoxically, as the underlying technical base of military and civilian products have converged (mostly around microelectronics), the very flexibility of the underlying technologies made it possible for the products themselves to diverge more than ever before, driven by the very different needs of military and civilian consumers. The military can now optimize semiconductor designs, for example, for higher speed processing, whereas many commercial chip producers want to emphasize low power consumption (often a necessary trade-off). A machine tool for the Air Force can be constructed with a built-in capacity to cut along five-axes in unbounded space, whereas a commercial cutting tool just needs to be able to carve a curved or straight line along a stencil. And defense satellites can be built and programmed to confuse enemy spy equipment, whereas commercial satellites are typically made to travel in predictable geosynchronous orbits.

Recent technological advances have enabled commercial producers to match and surpass military producers in product performance while maintaining their traditional superiority with regard to price. For example, while the Pentagon's Very High Speed Integrated Circuit (or VHSIC) program ultimately produced new high-speed chips for insertion into the cruise missile, Intel Corporation, which refused an offer to participate in VHSIC, met the same technical requirements commercially more than a year earlier, and at much lower cost.

In the U.S. military technology establishment today, there is a debate that goes under the heading "spin-on versus spin-

off." If spin-off means commercial applications of defense-oriented technology, spin-on suggests technologies designed in the commercial sector that can have military uses. Of late, as advanced technologies have proliferated, most Pentagon planners have concluded that advanced technology is simply too diffuse and dynamic for the military establishment to be the sponsor of every technology that might have military uses. Hence, even narrowly military needs require a broad commercial high-tech industry.

For the foreseeable future, America's industrial technology base will be shaped by three trends: declining military R&D and procurement budgets; an expanding overlap among technologies and materials underlying both civilian and military applications; and an increasingly global marketplace for high technology in which the much larger and more dynamic commercial component determines the overall direction of innovation. All three trends suggest there will be more spin-ons from commercial producers to the military sector and fewer spin-offs in the opposite direction. Given these trends, the United States can no longer bear the cost of maintaining two technology bases—one for the military, one for the marketplace.

Today the same functional elements of

Chips With Everything

When Dico Corporation, a Michigan machine-tool company, decided to work on an improved diamond coating for its cutting tools, Los Alamos was ready with a promising technology. Diamond-coated tools have been essential to the production of nuclear weapons for decades and increasingly are used in the manufacture of high-quality optical and electronic equipment, computer memory disks, and other manufacturing processes that require a high degree of precision. Under a Cooperative Research and Development Agreement signed with Dico, Los Alamos researchers will make minor modifications to the lab's existing fluidized-bed reactor to conduct diamond coating experiments. Dico engineers will evaluate the diamond-coated products, identify their best tool candidates, and then develop more wear-resistant tools for customers. The Dico-Los Alamos collaboration could help the U.S. to gain a larger share of the $2 billion market for superabrasive products, a market now dominated by foreign firms.

* * *

When U.S. auto executives toured the labs in the fall of 1991, they found an array of innovative technologies that could soon be used to help their troubled industry regain its competitive edge. They discovered "superplastic" metals and exotic aerogels—strong as metal, yet ethereal as smoke—that are also lightweight (meaning they can provide better gas mileage), easily molded (for superior manufacturing flexibility), and able to provide better insulation for sound and heat (especially important as cars become more dependent on heat-sensitive computer chips). They also examined sensors and computer imaging techniques—originally developed for nuclear weapons work—that can detect minute flaws in components and also monitor and provide feedback on production in process. They inspected batteries and fuel cells that store energy in spinning flywheels, offering the possibility of a nonpolluting electric car with range and refueling time comparable to the internal combustion engine. And they manipulated computer programs that can simulate flying bodies in a car crash and that model how a car might collapse under impact. General Motors has already signed up with Livermore and Los Alamos to explore these technologies further; GM, Ford, and Chrysler have all used Sandia's Combustion Research Facility to improve energy efficiency in engines and minimize environmental impacts.

government technology policy that once worked so well for the Pentagon—R&D subsidies, collaborative research projects, large-scale guaranteed launch markets, domestic diffusion mechanisms, and export controls—have purely civilian counterparts overseas. In Japan, in newly-industrialized countries such as Korea, Singapore, and Taiwan, and in an increasingly unified Europe, commercial producers need not wait for spin-offs from military-funded projects.

A New Mission

In light of the shifting relationship between military and commercial technology, what course for the national labs makes the most sense? Consider the three proposals that have emerged thus far.

Status Quo. The most conservative proposal, propounded in a January 1992 report of the Secretary of Energy Advisory Board (SEAB) Task Force on the Department of Energy National Laboratories, counsels adherence to the traditional defense missions of the laboratories, even while it argues that the world situation has changed radically. The task force sidesteps this contradiction, contending that "a strategic vision of the future missions of the National Laboratories cannot be developed until the Department and the Nation have developed a similarly clear vision of their own role in the future multipolar world." In fact, the report denies any role for the labs as part of a larger national economic infrastructure. The report minimizes the labs' role in technology transfer, declaring that it and "other activities" such as math and science education should be undertaken only insofar as they do not "detract from the overall Laboratory focus on their core missions." In effect, the task force's recommendation regarding diffusion of technology amounts to an endorsement of a "trickle down" theory of technology transfer that will transfer very little of practical use to industry.

Bifurcation. A second proposal has been advanced by Congressman George Brown, Jr., chairman of the House Science, Space, and Technology Committee. Responding to the SEAB report, Brown proposes that Lawrence Livermore be transformed into a wholly nondefense national laboratory, charged with the advancement of critical commercial and environmental technologies. In Brown's design, Sandia would become a technology transfer "center of excellence" and the main provider of arms-control verification technologies. A significantly downsized nuclear weapons R&D effort and a somewhat larger nuclear nonproliferation effort would be centered at Los Alamos.

Brown's proposal reflects an understanding of the economic security challenges facing this nation and a seriousness of purpose that is either wholly absent or obscured in the SEAB proposal. The proposal could, however, create inefficiencies and greater costs in the long term. In separating their defense R&D from civilian R&D efforts, the labs may fail to take advantage of the increasing similarities between the generic technologies of both sectors. For example, the microelectronics and advanced materials technologies used in defense technology are not significantly different from those in civilian production.

To be sure, defense products typically cost more, take longer to develop, and lag behind their civilian counterparts in both quality and performance. But such differences are not inherent in the technologies; the example of very high speed integrated circuits demonstrates how the organizational separation of technology development projects can interrupt the flow of information between research groups that gear their applications to the diverse needs of different customers. Rigidly separating defense and commercial labs would limit possible applications and spillovers. Congressman Brown's proposal, however well intentioned, would isolate defense from commercial development. But if the nation is to continue to integrate the most ad-

vanced technology into its defense systems at an acceptable price and pace, the flow of civilian technology into those systems should not be artificially constrained.

Partnership. The third and most visionary of the proposals to emerge thus far is a bill titled the "Department of Energy Laboratory Technology Partnership Act of 1992" introduced by Senator J. Bennett Johnston, the chairman of the Senate Energy and Natural Resources Committee. This bill would establish partnerships involving the DOE national laboratories and industry, universities, and other federal agencies for the purposes of research, development, and application of technologies critical to national security and technological competitiveness.

Recognizing the gravity and breadth of nondefense challenges the nation faces and the relevant technical strengths the labs possess, the bill is a refreshing departure from most standard congressional attempts to come to grips with the post-Cold War world. The bill casts a wide net, specifically identifying the need for partnerships in areas such as energy efficiency, energy supply, high-performance computing, the environment, human health, advanced manufacturing technologies, and transportation technologies.

The bill is designed to strengthen the 1989 National Competitiveness Technology Transfer Act, which, for the first time, permitted the national weapons laboratories to enter into cooperative R&D arrangements with the private sector. It suggests the need to form partnerships for the development of technologies targeted by the biennial National Critical Technologies Report—an effort derided by many free-market enthusiasts as an industrial policy exercise in "picking winners and losers." Breaking with past civilian government R&D initiatives, the bill stresses that the partnerships with industry should involve sharing costs; provide greater accessibility to the personnel, facilities, and capabilities of the labs; and seek to develop technologies that offer potential commercial value.

Still, there are a number of problems with the bill. The first and most critical shortcoming is that the partnership activities it promotes are meant merely to supplement traditional missions of the DOE and its labs in defense and basic energy research. These activities are likely to become subservient to "missions" of the labs and will not likely command priority funding and staffing.

Moreover, while the bill's emphasis on "dual use" implicitly recognizes the convergence of generic technologies in both defense and commercial industry, it overlooks the fact that commercial technology often outpaces military technology. The Pentagon's leading dual-use programs in the 1980s—in very high speed integrated circuits and strategic computing—led to few significant civilian applications.

The problem is that the funding for dual-use programs that make military applications paramount passes through (and is managed by) a Pentagon or armed services office. Despite the best dual-use intentions, the technical defense requirements imposed by these offices almost always aim the technology's evolutionary trajectory toward uniquely military applications. Thus a dual-use strategy dictated primarily by military needs ignores the fact that the commercial sector can increasingly accommodate military needs for products and processes—something that was not usually true in the past.

A final problem is the risk that this approach could lead the labs to be overly obedient to the short-term needs of private industry. Taken to an extreme, this approach risks turning the labs into short-term "job shops"; in short order, the resources and talents resident in the laboratories will be chewed up, burned out, and effectively dispersed.

Thus the three general proposals suffer from fundamental shortcomings, as does the resulting state of the debate. Instead, the labs should be retained as broad, multipurpose organizations, with new resources and a broader charter to work both on

"market-driven" projects with industry and on basic and applied research that serves the national interest.

Labs as Economic Infrastructure

The missions of the labs must be recast to meet the post-Cold War imperatives of national and global well-being. This is not to suggest that the national weapons labs abandon defense R&D. Rather, we propose that they radically shift their efforts toward meeting nondefense needs in such areas as energy, the environment, and health care, as well as economic competitiveness—essentially reversing the current 75 percent-25 percent ratio between defense and nondefense R&D efforts.

Under this conception, the labs would:

- pursue a civilian-driven R&D mission that is not merely appended to the present weapons mission but that entirely supplants the present mission in terms of importance;
- continue to serve the nation, not U.S. industry, as their primary customer;
- focus their R&D on a broad range of generic applications, with no "dual-use" bias imposed upon it;
- redirect their mission as part of a larger, comprehensive post-Cold War national science and technology strategy.

Notwithstanding the stale industrial policy debate of a decade ago, government has always played an active role in the U.S. economy—not in "picking winners" but in helping to incubate technologies. To compete in global markets, American firms need a place to work together to develop and diffuse generic, "enabling" technologies that are expected to produce significant spillovers (in terms of both product applications and manufacturing know-how) to a broad swath of industrial sectors. Today no individual firm has in place the same multiprogram, interdisciplinary strengths already present at the national labs, nor can any individual firm afford the investment in both time and money that would be necessary to create, from scratch, a similar range and breadth of expertise.

The national labs are not the only available instruments to develop enabling technologies, but as industry cuts back on its own long-term R&D, the labs play a more important role than ever. Bell Laboratories, for example, used to perform this enabling function for the American electronics industry with extraordinary distinction. Barred by antitrust agreements from marketing commercial applications of its own basic research, Bell Labs sold or licensed the results of that research to a wide array of electronics companies, foreign and domestic, which then went on to compete with one another on the basis of their own particular applications of the Bell-generated technology. The break-up of AT&T, and the resulting commercialization of Bell Labs, deprived U.S. electronics firms (and all the firms that use electronics products) of their guaranteed access (through widespread diffusion) to the latest technological breakthroughs. As a result, the entire U.S. economy was deprived of a powerful engine of economic development.

The national labs can help restore this engine of development and diffusion that the U.S. lost with the commercialization of Bell Labs (and which the Ministry for International Trade and Industry and NTT Labs still provide in Japan). Because the labs have no commercial interests of their own, they are a neutral cooperative arena for companies—many of them sometime competitors—to work together. At the same time, unlike other possible government arbiters, the labs are technologically competent in their own right.

Though still minuscule compared with their defense programs, successful partnerships at the weapons labs are under way in areas such as oil recovery, superconductivity, and specialty metals. These partnerships have four characteristics that define a useful model: they share costs, where government supports the laboratories and industry supports the research to which it

contributes; their efforts are focused on areas of technological opportunity; they are directed substantially at the local level, with decisions made by the partners, not government bureaucrats; and they are industry-

It would make as much sense to privatize science as to privatize the military.

driven—to ensure market relevance—but not industry-dominated. This approach, which the partnership bill emphasizes, should be refined and enlarged.

Since the passage of the 1989 technology transfer legislation, the federal government has increased funding for cost-sharing projects at the labs. Energy Secretary James Watkins has requested $117 million for such efforts for 1993, up from $69 million in 1992. Yet, these efforts remain underfunded, representing a small fraction of the budgets at the three weapons laboratories. For example, out of the approximately $250 million in nondefense R&D conducted in 1991 at Los Alamos (including basic science), only about $20 million, or 2 percent of the lab's total budget, went to support cooperative, nondefense R&D with U.S. industry.

There is still room for improvement, of course. Since the 1989 legislation, however, industry-laboratory interactions have been more constructive and productive and the level of trust and confidence continues to rise on both sides. Experience has overturned the simplistic view that the national labs are "technology warehouses" containing uncommercialized commodities ripe for the taking. The evolution from technology transfer to technology collaboration—an evolution accelerated by the 1989 legislation—marks a major shift for the better.

The national laboratories should also be given a strengthened mission in basic and applied civilian research. Such research is a public good, indeed, critical to a new definition of national security—the health, wealth, and overall well-being of American citizens. Under such a definition, research in alternative energy sources, energy-efficient transportation systems, and even mathematical algorithms, which can save millions in communication costs, becomes a top national priority. Consequently, it would make as much sense to privatize science as it would to privatize the military.

The national laboratories are the fruit of nearly five decades of public investment in state-of-the-art equipment, multiprogram research facilities, and world-class scientists and engineers. Indeed, the labs are unsurpassed in the federal sector for the quality of their research and the breadth of their achievements. The time is right to make the labs available to tackle a broader set of national purposes. For fifty years, government and industry teamed up to win the Cold War. With that battle won, and a new, peaceful, constructive competition getting under way, this is the moment to recognize the labs as the unique national asset they are.❖

The Faster Track

Should We Build a High-Speed Rail System?

Peter H. Stone

In 1966, James Powell and Gordon Danby, two scientists at Brookhaven National Laboratory, demonstrated the potential of using magnetic forces to lift, propel, and guide a wheelless vehicle with the capacity for much greater speeds than conventional trains. Federal funding for maglev, or magnetic levitation trains, followed for several years. But in 1975 all government support ceased because of a decision that America's highways, airways, and much reduced conventional trains were adequate to meet the nation's transportation needs.

However, Japanese and German scientists and their governments not only invested in faster conventional trains. They also saw the tremendous potential of maglev trains to cut travel time and save energy. To date, both governments have provided about a billion dollars to develop commercial prototypes that float along guideways at speeds approaching 300 miles per hour.

In many respects, the story of how Japan and Germany are racing to capitalize on yet another American invention has a depressingly familiar ring to it. But the picture may be changing now as political and economic shifts and the nation's worsening transportation crisis have helped boost U.S. interest in maglev and other forms of high-speed rail. Steel-wheel rail systems, at speeds of 125-200 miles per hour, are now commonplace in Europe and Japan. Maglev, often touted as the next generation of high-speed rail, is on the brink of commercialization in Germany and Japan.

Last year, Congress passed a major transportation bill that provides some $725 million for the development of a U.S. maglev prototype, and other congressional support is under consideration and gaining new proponents. Meanwhile several states, notably Pennsylvania, Florida, Texas, and California, have been active in promoting maglev and other high-speed rail projects to alleviate mounting congestion in their highways and airports. Support for maglev is also coming from other quarters, including environmentalists, who tout the technology's potential to save energy and curb air pollution.

Enthusiasm for maglev is also being spurred by two sea changes in the American political economy. First the demise of the Cold War and the retrenchment among defense contractors have made conversion a priority; maglev is one of several technologies eyed by defense companies like the Grumman Corporation seeking to diversify, and by the scientists and engineers who have long been the Pentagon's research and development army. Maglev typifies the sort of exotic technology with commerical potential that appeals to members of Congress seeking a

civilian equivalent of the Defense Advanced Research Projects Agency. Second, in the aftermath of Reaganomics, public infrastructure investment holds new appeal as a strategy of growth.

How Maglev Works

There are two basic types of maglev systems, which rely on opposite scientific principles. In electromagnetic systems, utilized by the German Transrapid on its twenty-mile prototype run, the levitating force is due to an attractive pull between conventional electromagnets on the vehicle and an iron rail located in the guideway. With this system the vehicle floats about three-eighths of an inch above the guideway.

The alternative approach, an electrodynamic "repulsive" system, is being developed by a Japanese rail institute. This approach uses coils of superconducting wire to push the train upward into a floating posture, and locates magnets on the upper side of the guideway. With the superconducting magnets the vehicles have the potential to be much lighter; in addition, the repulsive principle permits a much larger gap between the vehicle and the guideway, four to six inches instead of three-eighths of an inch. In both systems, the guideway's electromagnets both lift the maglev vehicle and propel it. Propulsion comes from the coils' alternating polarity, which pulls the vehicle from in front and pushes it from behind.

The superconducting approach has captured somewhat more interest recently and may be the best alternative for a U.S. system in the long run because it offers the potential for lower vehicle and guideway costs, more technical dynamism, and could lead to a more competitive version of maglev. However, the German system is closer to commercialization than the Japanese program and is the one that most domestic backers of maglev hope to develop in the U.S.

Fast Tracks Overseas

Japanese bullet trains, built by Hitachi, are now celebrating their twenty-eighth year. By the late 1980s bullet trains nationwide were serving 135 million people per year. Today about 260 bullet trains operate, at speeds of 170 mph. By contrast, Amtrak's fast trains reach brief peaks of about 125 mph.

Several of the Japanese bullet trains make money. The Tokyo-Osaka line, which cost $640 million to construct, was in the black after a year and a half. The Japanese government provided an initial subsidy during construction of the 320-mile line, but the bulk of the funding came from the World Bank and was repaid in the 1970s. Japan has also been in the forefront of maglev R&D. A new prototype, the MLU-001, combines retractable pneumatic tires at lower speeds with magnetic levitation at speeds that reach 323 mph, a world speed record.

Germany, meanwhile, has introduced electrically powered "ICE trains" (for Inter-city Express) at speeds of up to 180 mph. The first line went into service between Hamburg and Munich in the summer of 1991. The government has recently ordered 60 ICE trains at a cost of about $1 billion, which is just part of a larger $5 billion government backed program to improve its railroad system.

Eventually, the German government hopes to eliminate all domestic flights and transfer passengers to more efficient trains. German maglev, under the management of Transrapid International, has been tested at speeds of 290 mph and seats 80 to 100 passengers per section. As of mid-1991, more than 62,000 miles of testing had been conducted on a 19.5 mile track in Emsland. Transrapid, which has received more than $1 billion in government support, includes such private companies as Siemens and Daimler-Benz. A regular maglev line is under consideration for the Hamburg-Berlin run.

Several political and economic obstacles must be overcome if the U.S. is to develop or build a new high-speed rail system, maglev or steel wheel.

The biggest hurdle will be finding the billions of dollars in public and private financing that maglev will require while it is being developed and commercialized. It is inconceivable that private industry will both finance the technology and actual construction of maglev lines. Estimates vary widely but guideway and infrastructure construction have been estimated at anywhere from $10 million per mile to as high as $63 million per mile. This is more costly than highway or conventional rail, but roughly on a par with other high-speed rail systems.

An operational maglev system would likely require capital grants, or other forms of public subsidy, presumably by localities or states, as well as the federal government. Proponents, such as Joseph Vranich, the author of *Supertrains* and executive director of the High Speed Rail/Maglev Association, urge that federal tax law should give maglev and high-speed rail generally the same access to tax-exempt bonds as highway and airport projects.

Eventually, a high-speed rail system could be self-supporting—or very close to it. Amtrak, the closest U.S. analogy, now covers 79 percent of its operating costs from passenger revenues, up from 48 percent a decade ago, due to increased ridership and productivity gains. Amtrak now has 42 percent of all air and rail passengers on the Boston-Washington corridor. Foreign passenger rail systems do generally run at an operating loss, but several high speed systems have recently gone into the black.

Beyond its high cost, development of a national maglev system will require more federal planning and coordination than now exists. At present, the Army Corps of Engineers is responsible for developing an overall plan for implementing maglev; the Department of Energy is in charge of superconducting technologies and maglev's energy conservation potential; and the Department of Transportation has several roles. Safety concerns are the Federal Railroad Administration's problem; use of highway rights of way belong under the Federal Highway Administration; and airport connections fall to the Federal Aviation Administration.

Is High-Speed Rail Worth It?

Skeptics make three basic counter-arguments. First, America may have gone too far in dismantling its rail system to ever rebuild it in a cost-effective way. Population patterns that once hugged rail corridors have long since dispersed. Even in Europe and Japan, which are denser to begin with and which never abandoned their rail systems, high-speed rail is barely cost-effective. And high-speed rail overseas is well integrated with feeder lines that have been largely abandoned in the U.S.

Second, rail passenger transport is extremely capital intensive, as well as relatively inflexible. A bus or plane can go anywhere, given roads and airports. Planes, and buses can also be easily rerouted, as demand shifts. Trains, in contrast, go only where tracks go, and cannot quickly be shifted from region to region.

And third, even if there is a place for high-speed rail, on center-city to airport runs, or in densely populated corridors like Boston-Washington or Cleveland-Pittsburgh, it may still be preferable to rely on more conventional steel-wheel-on-rail systems, like the proven French or the Japanese high-speed trains, rather than the more exotic and largely untested magnetic levitation. One lower-risk alternative would be to let the Germans and Japanese continue to bear the cost of developing and testing maglev. If maglev does pan out, the U.S. could not only install maglev lines, but we could require maglev's Japanese or German developers to enter into partnerships with domestic firms so that America could get technology-transfer and employment benefits—just as our trading partners have often done with American inventions.

Who has the better case? Certainly the United States has let its rail system deteriorate, but the stabilization of Amtrak at 25,000 miles of track and 22 million annual passengers, suggests that there is indeed a consumer market for train travel on

dense corridors. Amtrak trains are, of course, far slower and less comfortable than the best high-speed trains of Japan or Europe. A skeletal high-speed rail system at an acceptable capital cost could probably attract enough passengers to prove its worth, and possibly justify further expansion. The flexibility argument makes a strong case for buses or planes on sparsely travelled routes, but is not relevant to a corridor with a high demand for regular service.

One of the most comprehensive and even-handed studies was issued in 1991 by a nineteen-member committee of the National Research Council, an affiliate of the National Academy of Sciences. The report, "In Pursuit of Speed: New Options for Intercity Passenger Travel," concludes that Europe and Japan are generally better positioned to exploit the advantages of high speed rail, because they have a long tradition of public subsidy and rider acceptance, as well as more extensive feeder systems and transfer terminals, but accepts the potential of high-speed rail on dense U.S. routes.

The report estmates that the most likely break-even point for a U.S. high-speed rail system would be about six million annual riders. To put that number in perspective, it equals the current number of annual flyers on just one well-travelled air route. The report finds the current level of steel wheel rail technology more cost-effective than maglev, and calls for further study of maglev before any decision to subsidize construction of passenger routes. For the near term, the council opts for importing available high-speed rail technology or joint ventures with foreign suppliers of steel wheel rail systems, rather than heroic efforts to develop home-grown technology.

As the council points out, however, performing a cost-benefit calculation of the worth of high-speed rail by comparing its capital or operating costs with those of alternative modes misses the most important benefit—the potential of high-speed rail to relieve congestion and reduce fuel consumption, pollution, and oil imports. These remain the strongest arguments on behalf of high-speed rail.

Maglev as Decongestant

The nation's increasingly inefficient and congested highway and airline systems are costing Americans billions of dollars yearly in delays. Total delays from both autos and planes now cost the country an estimated $15-20 billion per year and some transportation experts estimate that this figure could rise to $60 billion annually early in the next century. The FAA currently considers eighteen major airports badly congested, and projects that number could reach thirty-two by the year 1996. About 50 percent of all domestic air travel today is for trips of less than 500, miles which are especially expensive and inefficient in terms of fuel usage. It is these trips, especially on dense corridors, that are prime candidates for replacement by high-speed rail travel.

In this century, government expenditures for the nation's highways have totaled about $1 trillion (in 1982 dollars) according to the Congressional Budget Office. But many of those roads and bridges are in such sorry condition that to repair them adequately could cost as much as $3.2 trillion, according to government figures. And the Federal Highway Administration has calculated that vehicle delays due to congestion on freeways alone will rise four-fold from 1985 to 2005 in urban areas.

High-speed rail—maglev or steel wheel—potentially could help alleviate airport winglock and highway gridlock. Maglev is particularly well-suited for trips in the 100 to 500 mile range and could thereby reduce inefficient short hauls and free airports for longer trips.

A study done for Congress in 1989 by the Maglev Technology Advisory Committee, a group composed of early maglev researchers, defense firms, and private companies interested in technology, notes that per passenger mile maglev uses about one-half the thermal energy of autos and about one-fourth as much as airplanes. Because it

is frictionless, it will require less maintenance. Unlike airlines, it is not constrained by weather conditions. Maglev also conserves land use and minimizes land acquisition costs, to an even greater degree than conventional rail. And maglev guideways are well suited to the existing rights of way along the interstate highway system. The advisory report indicates that a two-way maglev system requires only about fifty feet of width.

If maglev comes to America, it will almost surely come not via a massive federal outlay, but through incremental local initiatives that initially consume modest federal subsidies, prove their worth, and eventually are bootstrapped into a larger regional or national system. Over the last few years Pittsburgh has emerged as the nation's most ambitious effort to promote maglev, through a private/public partnership called Maglev Inc. The list of partners reads like a greater Pittsburgh boosters' association: the United Steelworkers of America, Carnegie Mellon Research Institute, the city of Pittsburgh, Allegheny County, Wheeling-Pittsburgh Steel, local building trades, Duquesne Light, the law firm of Reed Smith Shaw and McClay, and the Tri-State Conference on Steel.

Maglev Inc. hopes to make Pittsburgh the center of the technology in the U.S. and to create tens of thousands of new jobs in construction, steel and other industries by building a regional network linking Cleveland, Erie, Wheeling, and other nearby cities with Pittsburgh. Maglev, Inc. estimates that it would require some eight to ten million riders yearly for a regional system to break even. Despite the present edge that Germany and Japan enjoy, the technology's American supporters hope to build on joint ventures, in this case with German partners, and eventually develop a more sophisticated second generation of home-grown technology.

Pittsburgh will test the concept with an initial nineteen-mile demonstration system, to be open by 1998, that will connect downtown with a new airport. Thus far, Maglev, Inc. has raised about $2 million, of which some $1.1 million has come from federal, state, and local government. The nineteen-mile demonstration will cost about $450-600 million. The ride will take ten minutes. The Pennsylvania legislature is considering Governor Bob Casey's request for an initial $2 million as a state contribution to the demonstration line. Maglev, Inc. is considered a prime contender for federal funds that will be available next year after the Federal Railroad Administration completes a study identifying the five 100 to 600 mile corridors nationwide with the best potential for high-speed ground systems.

Maglev as Conversion

In principle, maglev technology is an ideal candidate for military conversion. Like defense purchases, it offers the prospect of technical dynamism, at the frontiers of advanced manufacturing. As a new high-tech export industry, it could provide well paid jobs and export earnings. It could also re-employ military producers, their engineers, and factory workers as defense production winds down. By government estimates as many as 2.5 million military and civilian workers could lose their jobs in the defense industry as the Pentagon's budget is reduced.

Three defense contractors have expressed interest in the Pittsburgh project—but only if the work involves government contracts. One major contractor with dwindling defense business is the Long Island-based Grumman Corporation. New York Senator Daniel Patrick Moynihan and Representative Tom Downey, the local congressmen, helped push the high-speed rail legislation through Congress, with Grumman specifically in mind.

Still, there are real risks with economic conversion programs like this one. Grumman's last major foray into mass transit was something of a fiasco. In 1978, the contractor bought a bus company, Flxible

Co., from Rohr, at a time when Grumman was trying to protect itself against falling orders for the F-14 fighter. But Grumman simply used the Rohr design for the bus without any of its own technology or equipment. The results were disastrous. The bus was sold to New York City and early on one collapsed, when the A-frame holding up the body over the rear axle broke. Other transit systems using the buses pulled them off the market or cancelled orders. Grumman checks then revealed four major components in the bus's chassis were at risk of structural collapse. Finally, Grumman agreed to retrofit all 2,900 buses; in 1983 it got out of the bus business.

To be sure, Grumman has also had some conversion successes. After World War II, the company had an excess supply of aluminum and found two uses for the metal that ultimately resulted in creating successful commercial subsidiaries that are still part of the company. Grumman started making canoes and large high-sided commercial trucks with its Grumman Olson unit; and the truck enterprise has become the nation's largest producer of walk-in truck bodies.

Grumman's mixed experience illustrates some of the pitfalls of using technologies such as maglev as a conversion strategy. Students of defense contracting have long observed business culture problems in converting from military to commercial production. Characteristically, defense firms maxmize their profits, in a cost-plus contracting environment, by maximizing the project's costs.

Do the Locomotion

While maglev projects are gaining momentum, high-speed steel wheel programs are moving along at a faster clip in several states because the technology has already been fully developed and commercialized overseas. Texas today is one of the strongholds of high speed rail activity. In early 1992, the Texas High Speed Rail Corp., which includes the construction giant Morrison Knudsen, won approval to build an intercity line connecting Dallas, Fort Worth, Houston, San Antonio, and Austin. The company was awarded a fifty-year franchise by the state and construction is expected to begin in 1995 and open for revenue service in 1998. Using the technology of the French Train a Grande Vitesse (TGV), the project is expected to cost $5.7 billion and when it is completed will provide some thirty-four round trips daily between the Dallas-Fort Worth Airport and Houston, at speeds of about 200 mph.

Amtrak plans to test a Swedish train, the X2000, on its Boston-New York and New York-Washington lines. The X2000, which employs a tilting mechanism that allows trains to take curves at high speeds, is expected to be used at speeds of up to 150 miles per hour by Amtrak; this could cut the Boston-New York trip from four to three hours. High speed, however, will require a better roadbed and track—and more federal support.

Congress provided an initial dose of federal funding for high-speed rail in the 1991 Intermodal Surface Transportation Efficiency Act, dubbed ISTEA. That legislation gives prototype funding to both maglev and steel wheel systems. The major accomplishment of the act was to set up a national magnetic levitation prototype development program, backed by $725 million in federal money. Of this total, $500 million comes from the highway trust fund, and the balance from general funds. It is expected that this should generate some $1 billion in industry and private investment as well. ISTEA contains several other provisions aimed at advancing both maglev and steel wheel high-speed rail. Key provisions include:

- Authorization of $1 billion in government guaranteed loans to finance the construction of high-speed, steel wheel systems.
- A $25 million fund for R&D, into all kinds of high-speed ground programs, which is designed to spur more private investment.

- A $30 million outlay from the highway trust fund to eliminate hazards of rail-highway grade crossings in five corridors.
- An initial $97.5 million for an Orlando maglev project, which will be a fourteen-mile line connecting the airport with Disney World. The funds are to go for the acquisition of the rights-of-way and to subsidize guideway construction.
- Authorization for states to use federal funds to modify existing highway facilities to allow high-speed rail systems to use them.

Although the Bush administration signed the bill last year, recently it sought to withhold the first year's funding. The House concurred; however, the Senate this summer included an appropriation for the first year of $45 million; the matter now goes to conference.

High-speed rail advocates have made much headway changing the law on tax-exempt bonds to give rail the same access that airlines have. Proponents succeeded this summer in attaching an amendment to the omnibus energy bill. Interestingly, the bill was co-sponsored by Democrat Bob Graham of Florida, home of Disney World and conservative Republican Steve Symms of Idaho, home of Morrison-Knudsen.

Railroaded?

Notwithstanding their recent successes, both maglev and high-speed steel wheel systems face formidable roadblocks to faster development. In Congress, despite the legislative victory of ISTEA, the nascent industry still lacks the clout of other transportation lobbies such as highways, airlines, and conventional rail.

More broadly, the image of the new industry is to some extent tarnished by a half-century decline in railroads generally. Of course, this bias is reinforced by America's love affair with the automobile, which has helped fuel the biggest public works project in history, the now almost complete interstate highway system. The total cost of the 42,000-plus mile system, was $122 billion, or three times the original estimate. A similar romance with the airlines is reflected in President Bush's fiscal 1993 budget, which contained a call for $9.4 billion in funds for civil aviation, of which $8 billion comes from the aviation trust fund financed through ticket taxes. By contrast, from 1942 to 1962, for instance, rail travelers paid $2 billion in taxes all of which went straight to the Treasury—and of course there was no rail passenger fund.

Given that rail travel begins with a historic disadvantage, its reclamation will require strong executive branch support. Big, highly visible projects such as rail corridor lines are also vulnerable to pork-barrel politics, and it undoubtedly took a measure of home town concern for Congress to put high-speed rail funding into the ISTEA legislation. On the other hand, Amtrak over the years has put its trains where the passengers are, with only minimal meddling from Congress, the most famous case being Senator Robert Byrd's lightly traveled passenger train into the Shenandoahs. Executive branch support tends to minimize the risk that a public works project is simply the lowest common denominator of parochial congressional interests.

If Clinton should be elected, high-speed rail could get a big boost as part of his public infrastracture program. Another Bush administration would likely leave high-speed rail initiatives to Congress and the states, and there would be less federal support.

The technology, however, has its own logic. It is attractive as a form of transportation, as a conversion strategy, and as a dynamic application of scientific know-how. Even if the government is not yet committed to a large-scale system, regional interest in high-speed lines offers a good way to test the potential. And other nations will continue rail development, whether or not we do. One way or another, high-speed rail systems are definitely on the horizon. For America, the issue is whether they'll be coming on a slow track or a fast one.❖

Where Private Investment Fails

Bennett Harrison

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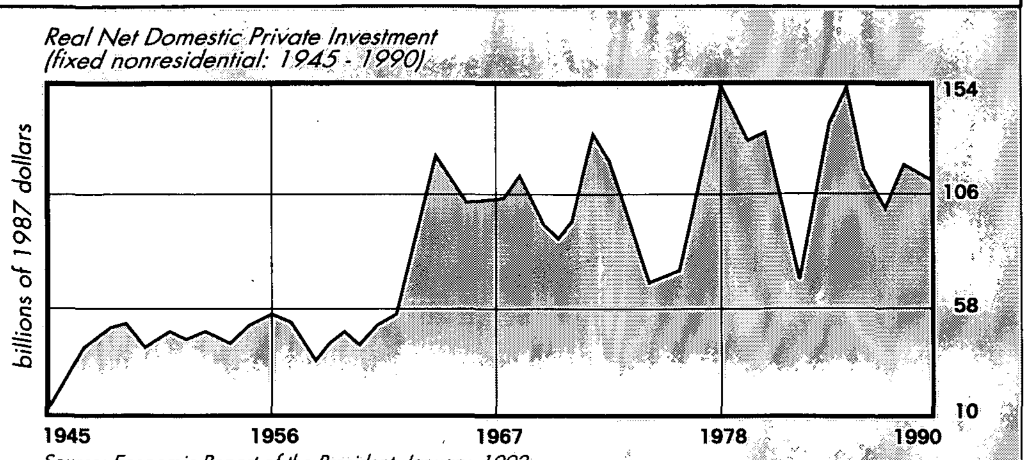
To hear it from the White House, the U.S. experienced a recession in 1990 after eight years of extraordinary economic growth, and is still doing "pretty well" even now. True, admits President Bush, the current recovery is less bullish than he would wish (read: the most sluggish recovery since the 1930s). But if we just give it, and him, more time, and perhaps help it (him) along with a dose of stimulation via cuts in the capital-gains tax and via Congressional approval of his North American Free Trade Agreement with Mexico, everything will be fine. Just get government out of the way, and private investment will save us.

Not likely. Even in absolute dollar terms, growth in real domestic non-residential private investment, net of depreciation, flattened in 1973 (see chart). Since then, movement in this key indicator of private sector willingness to purchase new industrial, commercial, and office plant, equipment, and buildings has been entirely cyclical. The strong investment growth of the 1960s is now a distant memory.

According to new data from the Bureau of Economic Analysis in the U.S. Department of Commerce, in 1965 net capital formation constituted 10.4 percent of net domestic product (NDP). By 1991, it had fallen to just 3.4 percent. Since the late 1980s, private investment as a share of NDP has been rising in Japan, the U.K., and, more recently, Germany. But in America, it continues to sink like a stone.

On news broadcasts, in newspapers, and at congressional hearings, conventional economists purveying conventional wisdom repeat one particular explanation for the collapse of U.S. private domestic investment: low public and private savings, made even lower by the

Whither Private Investment?



Source: Economic Report of the President, January, 1992

now chronic federal budget deficit. To end this "crowding out" problem, the story goes, we need to deflate the economy. When the deficit falls, savings rates will rise; long-term interest rates will fall, and investors will borrow money again to finance the building of new plant and equipment. This is a strictly macroeconomic tale, and in the primacy it awards to savings behavior, it is really a warmed-over, pre-Keynesian, pre-1930s macroeconomics.

In fact, the mainstream assessment of where we have been, and how far private investment is capable of taking us, is plain wrong. Now, however, help in setting the record straight has come from a most unexpected place: the Harvard Business School. Eighteen new research papers known as the "time horizons project," including a synthesis by business strategist Michael Porter, are reintroducing a healthy institutional realism into the debate about why America's private companies chronically underinvest in projects lacking a short-term payoff and why (when they do spend) they tend to invest in projects that, taken together, retard long-run economic growth.

Partly a cogent restatement of older institutionalist themes, partly an effort to quantify important but hitherto elusive concepts, Porter & Co.'s time horizons project has produced the most comprehensive picture so far of why you can't make sense of private investment behavior without paying attention to the institutional details. Even with its glaring omissions—especially when it comes to exploring the interdependence between private and public investment--the Porter report may well be the most thoughtful, systematic analysis of interrelationships between capital markets and the big corporations at the core of American capitalism since, well, since the work of Porter's Harvard elders: John Kenneth Galbraith and Alfred D. Chandler, Jr.

The twenty-five economists, finance experts, business historians, and industrial relations specialists who participated in the time horizons project argue that Germany and Japan inherited from their own past, and then refined after World War II, a coherent set of institutional arrangements that systematically favor the long-term growth and survival of their companies over short-term monetary earnings. In one of the project's most important papers, Harvard

economist Lawrence Summers and MIT's James Poterba present the results of their interviews with a large sample of Japanese, American, and European CEOs. They find that U.S. investors tend to demand much higher minimum acceptable rates of return for their capital—so-called "hurdle rates"—than their foreign competitors do. In recent years, investors here have been rejecting projects with expected inflation-adjusted payoff below 12 percent—even though the recent real cost of debt has averaged only about 2 percent and the real cost of equity about 7 percent. Moreover, where a healthy share of the research and development portfolios of foreign corporations include explicitly long-term projects (47 percent for the Japanese companies studied, 61 percent for the Germans), only one out of five projects being undertaken by U.S. companies could be classified as long-term.

As a result, U.S. corporations are underfunding projects that could eventually create lasting employment, profits, and opportunities for experimenting with new technologies and new forms of production organization. In their place, Americans invest disproportionately in real estate and unrelated acquisitions—which, as another Harvard economist, F. M. Scherer, has shown, have generally been poor performers in the marketplace. Such portfolio investments may generate short-term earnings, but they do not add to the net stock of real productive capital in an economy. In Porter's words, they merely involve the "trading of assets from one owner to another." Moreover, as we now know, the massive borrowing in the 1980s to finance all of this essentially unproductive activity drove up debt-to-equity ratios to the point where, even in the present cyclical recovery, investors are still reluctant to open their wallets—one reason why the present macroeconomic recovery has been so anemic.

What makes this project, co-sponsored by the "real" Council on Competitiveness, so surprising is its conclusion: real capital formation in the U.S. since the 1960s has been distorted by the rules, procedures, and customs governing private-sector allocation of capital rather than by profligate government spending or the overregulation of business as the "other" Council on Competitiveness—the one chaired by Vice President Quayle—alleges.

In the belief that the global competitiveness of U.S.-based companies can be enhanced by obliterating bothersome regulations, Quayle's Council on Competitiveness ferrets out and dismantles health, safety, environmental, and other regulations that increase the "cost of doing business." That most of the nations with whom we compete usually have even more stringent standards than ours, especially regarding workplace conditions, either goes unnoticed by the Quayle council or is deliberately ignored.

Far more compelling is the work of the other Council on Competitiveness, located a few blocks from the White House. This council, once a creation of the Reagan administration, went private when the White House ignored its findings. Its work on the real competitiveness problems of American business is directed by chief executive officers and other senior executives from Motorola, Hewlett-Packard, and other private firms, labor leaders, presidents of MIT, Stanford, and other universities, and directors of the national laboratories. In six short years it has produced an impressive number of reports, seminars,

newsletters, and congressional testimony such as the eighteen papers that constitute the time horizons project.

In this new project, Porter's institutional sensibilities lead him to play down, without wholly rejecting, the conventional macroeconomic wisdom about the responsibility of excessive taxation and extravagant federal deficits for the high long-term cost of capital, which supposedly suppresses long-term investment. Porter, like the usual suspects, wants to understand why the cost of capital has been relatively higher, at least until recently, in the U.S. than elsewhere in the industrialized world. But for his answers, he looks to the institutional structure of contemporary capital markets, rather than to macroeconomic aggregates.

Institutionalism Redux

In the second half of this century, mainstream economics has given ever shorter shrift to the role of institutions in explaining the economic behavior of buyers and sellers, bosses and workers, investors and managers, public officials, and citizens.

In particular, the idea that markets in different countries—especially capital markets—might operate according to qualitatively different rules and norms, and present economic actors with different sets of choices and trade-offs, has been treated as either uninteresting or unfathomable. After all, we were told in Economics 101 that the very process of competition via the free movement of "inputs and outputs" across regional and national borders would, over time, erase lingering institutional differences that might be of any consequence to business. Relative prices and resource endowments—two sides of the same coin, really—were what mattered, not rules, institutions, or norms. That was just the stuff of "sociology" or, worse yet, "politics."

No wonder, then, that conventional economic thinking has not had much luck explaining why so many U.S. corporations, compared with their Japanese and German counterparts, systematically underinvest in ventures that lack a near-term payoff, avoid retooling and upgrading "mature" industries, shy away from risky research and development, and underinvest in the lifetime training and education of employees or in the development of long-term, collaborative relationships with suppliers and customers.

On the other hand, over the course of the last fifteen years, "new institutionalists" from MIT's Lester Thurow to Harvard's Robert Reich, Robert Hayes, and the late William Abernathy have repeatedly sent up storm warnings about the "short time horizons" of all too many homegrown companies and investment bankers. We have heard a former Republican Treasury official make similar arguments in *Short-Term America*, and a Democratic counterpart has been offered in the several reports of Mario Cuomo's Commission on Industrial Productivity. This disorder, we have been warned, has been growing since the 1960s. Only now, as the international competition heats up, are we realizing the extent of our systemic disadvantage competing against corporations based in countries better equipped than the U.S. to nurture and encourage such long-run investments. As Thurow frames the argument in his latest book, the "new world order" comes down to a "head-to-head" competition among

qualitatively different kinds of capitalism. Some of capitalism's national "ensembles" of institutions are simply better adapted to the game of global competition than are others.

In fairness, many U.S. companies are still more than holding their own, domestically and abroad—in chemicals, pharmaceuticals, software, telecommunications equipment, and for the moment, civilian aircraft. But, especially when it comes to the modernization of mature industries and especially if the subsidies provided by Pentagon procurement are discounted, much of the U.S. economy is falling behind the competition.

The Porter analysis comes at a time of a revival of institutional sensibility in American political economy. A history of the rise and decline into obscurity of the once-fertile institutionalist stream within American economics would take us too far afield of the immediate subject of this article. Suffice it to say that the historically and socially empirical economics of Thorstein Veblen, John Commons, John Bates Clark, and others who shared Adam Smith's empirical curiosity about commerce gave way to the "empiricism" of the mathematical formalists, for many of whom ignorance of the details of commercial life has been a badge of professionalism.

Something of an institutionalist revival (though not so named) began in the 1970s with the work of and reactions to, Berkeley economist Oliver Williamson. Beginning with his book, *Markets and Hierarchies*, and building on the earlier (but by this time fugitive) ideas of Ronald Coase, Williamson sought to employ the analytical tools of orthodox economic theory to pose a question that the mainstream had substantially abandoned since the Depression era: Why do market economies inevitably reinvent powerful oligopolies that engage in capitalist planning—stabilizing market shares, organizing networks, regulating technical standards, limiting ruinous price competition? The answer could not be merely that offered by Adam Smith—a self-interested conspiracy of businessmen against the public. For, in some sense, oligopoly seemed functional to capitalism itself. A few renegades, including Galbraith, had never ceased asking this question, but their work was dismissed by the mainstream as lacking a consistent or approved methodological foundation.

In the 1930s, Ronald Coase had tried to use conventional methods to break inside the "black box" of the firm to understand the rules and procedures by which actors in an organization or polity achieve coordination and legitimacy. This was an attempt to integrate the institutionalist idea of governance with the orthodox premise that firms must be organized so as to maximize profits in the short run. Coase's microeconomics remained largely unnoticed until resurrected by Williamson nearly forty years later. Just last year, Coase won the Nobel Prize in economics for his seminal ideas. Better late than never.

Williamson borrowed from Coase the concept of "transactions costs"—the idea that the market price in any transaction may fail to incorporate the full costs to the seller or buyer because of the very conditions of exchange. In particular, whenever there is uncertainty or the need for long-term relationships, the parties to a transaction are unlikely to be able to write contracts complete enough to cover all the contingencies or hidden costs. Furthermore,

incomplete contracts encourage one or the other party to behave opportunistically, deliberately withholding information or broadcasting disinformation to get a better deal.

In such cases, the transaction is likely to occur under a single roof, inside a "hierarchy" (that is, firm). This solution "internalizes" or reveals to the decision makers those otherwise hidden costs. Williamson showed that there are, even in pure theory, situations in which the inefficiencies of bureaucratic organization are offset by the greater predictability of the outcome. This is showing quite a lot, at least to academic economists. It says that under rather common circumstances it is efficient (maximizing of profits, minimizing of long run average costs) for explicit rules, regulations, commands, organization charts, and social contracts to replace the invisible hand.

With the first book and then his subsequent amendations, published a decade later in *The Economic Institutions of Capitalism*, Williamson created a small but steadfast school within university economics and generated an enormous outpouring of explicitly institutionalist criticism, especially from sociologists and economic geographers. As a complement to Galbraith's and Chandler's "logic of managerial capitalism"—the idea that the exploitation of economies of scale and scope requires the amassing of considerable political and economic resources under the "visible hand" of corporate planners—Williamson and his followers have revived academic interest in the theory of the business enterprise.

More recently, Geoffrey Hodgson has written about the "new institutionalism" from the perspective of economics, while sociologists Walter Powell, Paul DiMaggio, and Alejandro Portes have built on the research agenda of Mark Granovetter, a social scientist who resurrected and elaborated Karl Polanyi's protean idea that real economies are always "embedded" in a social framework necessary for their survival. The task is to figure out how and why individuals and groups behave in the context of these conditions.

Within the sub-field of studies of technological innovation, almost everyone of consequence, from Richard Nelson to Giovanni Desi, now takes the centrality of institutions almost for granted. As exemplified by the work of Fred Block and John Gerard Ruggie, international political economy is being rebuilt around explicit studies of the nature of the institutional arrangements governing the old and the new regimes of global capitalism. Even the "new trade" theorists, such as Berkeley's Laura Tyson and MIT's Paul Krugman, are substantially institutionalist.

Most of the contributors to the time horizons project would be surprised to see themselves characterized as neo-institutionalists. Yet what they have collectively produced shows the importance of rules of thumb, belief systems, learning behavior, self-fulfilling prophecies, and other nonprice phenomena in explaining how and why American capitalists make investment decisions and why our particular arrangements harm us in global competition.

The key to understanding why American corporations take an ultimately counterproductive short-term approach to investing begins with the structure and behavior of what Porter calls "external" capital markets. In Germany and

Japan, Porter notes, a company's major shareholders tend to be other big corporations that have easy access to company information and thus participate directly or indirectly in management decisions and monitoring company progress. Meanwhile, U.S. insurance companies, mutual funds, and individual investors alike often know little or nothing about the messy details of making steel, wiring silicon chips, or communicating via satellite. Instead, American investors employ armies of professional market analysts and portfolio managers. In the absence of substantive inside information (which is illegal as a basis for trading) everyone tends to fall back on those indexes that can be most easily and inexpensively measured and communicated—recent and projected quarterly earnings. Agents build their careers by bouncing between investment banks and mutual funds, competing for status and income by how well they can predict and how often they can jump from one ship to another. There is no lifetime employment in this system.

Inside the corporations themselves—in what Porter calls the internal capital markets—things aren't much better. American boards of directors are made up of executives of other firms, who know too little about the substantive business they are being paid to "direct." The firms themselves have become so complex, after thirty years of conglomerate mergers, acquisitions, break-ups, and segmentation, that even their managers and senior technicians have difficulty talking across what often amount to fire walls. In the effort to communicate across these barriers, even the "insiders" are driven toward simple goals such as maximizing share prices. Once again, we get management by the numbers.

Moreover, U.S. companies often compensate their managers with stock options, which of course only ties their behavior that much more closely to current share prices instead of to long-term prospects. Porter is not saying that incentive pay is, in principle, the problem, only that the American system ties incentives to a short-term rather than a long-term signal.

The predictable result of the existing incentive system is that the managers' tenure, like the shareholders', is likely to be short. This further compounds the problem caused by inadequate numbers of key employees with firm-specific knowledge, which in turn promotes the use of those easy-to-read indicators such as stock price and quarterly earnings.

The net result of these mutually reinforcing behaviors, played out within strongly entrenched institutions, is that financial capital in the American industrial system is indeed, as Reich and Thurow have long asserted, systemically "impatient." One set of numbers from the time horizons project drives the point home. In 1960, big institutional stockholders in the U.S—the pension and mutual funds—held on to a share on average for seven years. By the 1980s, the average period had fallen to only about two years.

In Porter and Co.'s encyclopedic accounting of differences in capital markets, these particularly caught my attention:

- Hostile takeovers are nonexistent in Japan and next to nonexistent in Germany, by custom or law or as a result of the extensive cross-shareholding among customers, suppliers, and bankers.

- The assets of German workers' pension funds are customarily dedicated to purchasing only the stock of the company employing those workers—a practice that may not be "prudent" in the eyes of American regulators but that undeniably strengthens the ties between German labor and management. Here we have the makings of a "virtuous circle," in which dedicated capital enhances the firm's prospects for survival, thereby reducing the need for heavily regulated prudence.
- The capital budgets of German and Japanese companies treat expenditures on training, R&D, development of closer relations with suppliers, and the initial losses associated with entering new markets or territories as investment, on a par with spending on new plant and equipment; U.S. companies record only the latter. In other words, even their accounting practices are geared toward the long run.

The Missing Link: Public Investment

It is unfortunate that the time horizons project chose not to devote any attention at all to the differences across countries in the determinants of *public* investment—especially since Porter acknowledges that "public sector investment in education and efficient transportation, communication, and information networks is also critical to industrial competitiveness." Moreover, he readily admits that "government actions can support or inhibit" each of the elements of his own model of the sources of competitiveness: the inclination of key customers to press for continual innovation; the availability of skilled labor; the local presence of qualified suppliers; and vigorous but constructive rivalry between the focal firm and its competitors.

Actually, in the time horizons project and his other recent writings on strategy, Porter is inconsistent on the question of the proper role of government. For example, because he so highly values the goad of competitive rivalry, Porter often warns against public policies designed to promote greater collaboration among competitors. That's why he is no great fan of such R&D consortia as the U.S. semiconductor collaboration, Sematech, or the European computer collaborative, ESPRIT. It is, however, legitimate in Porter's view—perhaps even critical—for customers to collaborate with their suppliers. But in the brave new world of just-in-time parts delivery and integrated product design, where companies frequently take turns playing customer and supplier, this advice becomes somewhat confusing.

Burgess Laird, a staff member of the Center for National Security Studies at Los Alamos National Laboratory, observes that while Porter, in his 1990 book, *The Competitive Advantage of Nations*, recognizes the importance of a high-quality local training infrastructure to Japanese and German competitiveness, he doesn't address the fact that such supports are nurtured by regional government institutes that provide training, like the Japanese *kohetsushi* and the German *Frauenhoffer*. Porter's silence in "Capital Choices" on the appropriate content of an American-style industrial policy stands in notable contrast to the fairly explicitly pro-policy stance embodied in just about everything else that the Council on Competitiveness has published over the

last five years.

Of all the appropriate roles for government in a larger public-private program to revive investment, none is more important than what the Swedes call "active labor market policy." It is not enough to call for more education and training, as another item on a list. Physical and human capital have to be developed in a coordinated way. For example, if new technology is embodied in new plant and equipment, and if a program to increase the rate of new private and public investment is what we most need right now, then any innovative investment plan will dislocate some workers—certainly as long as the aggregate rate of economic growth remains sluggish. Some of that dislocation can be anticipated by wise labor market policy. Workers can be offered alternative employment or steered toward retraining opportunities before the plant, laboratory, or store shuts down. New markets can be sought for the businesses that would otherwise go under. And new publicly initiated economic development programs, from high-speed rail to the expansion of neighborhood health clinics, can be designed and timed so as to ease the transition for those dislocated workers. If there is a legitimate role for government in easing working people's pain in the transition to a North American Free Trade Agreement, or in the demilitarization of the economy in the wake of the Cold War, surely there is a legitimate role for public policy in helping workers to bridge the inevitable disruptions that any investment-led recovery program worth its salt would inevitably bring about.

Despite the unwillingness of the time horizons project to investigate the contribution of public investment, it is easy to see an overarching conclusion emerging from the research. In the international competitiveness race, we are up against entirely different socioeconomic *systems*—what French political economists would call fundamentally different "modes of regulation."

The Cold War blinded us into imagining that the global contest was between capitalism and communism, as though all capitalist systems were essentially similar. Instead, it appears that companies are to a great extent the products of, and rely on, the supporting institutions of particular national systems for regulating the allocation of capital. Some of these systems compete more efficiently than others.

The U.S. may be able to copy some elements of these foreign institutions. Of course, Porter wisely warns us that such arrangements come in complex bundles and, anyway, the foreigners have their faults too, like their putative overcommitment to existing firms at the expense of new startups. Nonetheless, we Americans clearly face the need to overhaul our own native laws, regulations, institutions, and customs—a task rather more daunting and complex than picking winners or increasing the savings rate. It is inconceivable that such an undertaking can proceed without the close cooperation of the private and public sectors, since the relevant rules are deeply rooted in both. Porter has set a fine example for his fellow economists by continuing the belated rediscovery of comparative institutions.❖

Conversion Then And Now

David A. Casagrande

Nine trillion dollars later the Cold War is over, and the prospect of converting industries to peacetime objectives seems at once inevitable, improbable, and replete with momentous opportunities. We have been here before, of course. America went through a very deliberate conversion process beginning in 1939, which gave way to full mobilization in 1942, and a somewhat hectic though still planned "reconversion" in 1945-46. What is astonishing about the current transition is the general obliviousness to how heavily the Cold War economy has used military spending as both a spur and a crutch. Nor is there any organized effort to maximize the conversion opportunity, much less to minimize the pain.

In part, the absence of a coherent conversion plan reflects wide disagreement about the effect of military spending on the economy. To the extent that mainstream political and economic opinion has focused on this question at all, observers have divided into two camps. In general, those politically hostile to the Cold War found economic reasons to dislike it as well, while those who supported its strategic purposes emphasized the positive "spinoffs" of military technology. Planning for an economy less reliant on military outlay requires an accurate assessment of how the Cold War interacted with non-military economic life.

For the critics, the military economy is mostly a parasite on civilian needs, diverting resources, creating, in Mary Kaldor's phrase, a "baroque arsenal," that channels scientific resources, technologies, and corporate cultures onto narrow paths dictated by the parochial needs of the Pentagon. Ann Markusen works broadly in this tradition, both

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in her new book with Joel Yudken, *Dismantling the Cold War Economy*, and in her earlier *The Rise of the Gunbelt*, written with three colleagues. A far more complex and qualified critique is offered in *Beyond Spinoff*, which holds that defense spending has been a positive stimulus to the American economy, at least some of the time, notably by leading and diffusing technological advance. The authors include four scholars from Harvard's Kennedy School of Government, Lewis Branscomb, former chief scientist of IBM; Harvey Brooks, former Harvard Dean of Engineering; Ashton Carter, director of Harvard's Center for Science and International Affairs, and Gerald L. Epstein, director of Harvard's research project on dual-use technologies. They are joined by John Alic, a senior associate at the Office of Technology Assessment.

Where the two works emphatically agree is their common conclusion that, with the Cold War over and military outlays declining, the nation needs a civilian technology policy to replace what was either partly beneficial (Alic et al.) or mostly malign (Markusen et al.), but which is, in any case, rapidly dwindling.

This debate is as old and complex as the Cold War itself, and the literature on conversion is vast. Seymour Melman, perhaps the most prolific writer on the subject, is widely known for his "depletion" thesis first put forth during the 1960s. He has argued consistently that defense spending fails to generate economic growth, diverts intellectual, financial, and material resources away from civilian industries, militarizes society, retards research and development, and preempts a significant share of the nation's capital stock. In *Our Depleted Society*, he maintained that a "depletion process" in American industrial life followed from the diversion of capital and technology to the military in the 1960s. In *Pentagon Capitalism*, Melman described the subsequent formation of a Pentagon-based management over the military economy, which made the Defense Department a de facto planning ministry with enormous power over a substantial portion of America's resources, as well as exploitive power over American society and foreign countries. Finally, in *The Permanent War Economy*, he outlined the workings of a new economy generated by the military system, which resembles a type of "state capitalism." This new regime, he argued, contributed to a loss of individual liberty and the erosion of industrial productivity.

Though the Cold War did lead to a substantial militarization of American technical and scientific capital, it had positive effects as well. As it turns out, the "sapping" effect of defense spending on the civilian economy is not quite as enfeebling as Melman (and others who write in this tradition such as Lloyd Dumas, John E. Ullman, Mary Kaldor, and Paul Kennedy) would frame it. Even Melman concedes that, as a matter of macroeconomics, Pentagon spending played an unintended Keynesian role.

Markusen and her colleagues extend the depletionist thesis in a more subtle and appropriately complex fashion. In *Dismantling the Cold War Economy*, Markusen, a professor of urban planning and policy development and director

Christopher Bing after E.M. Ashe

of the Project on Regional and Industrial Economics at Rutgers, along with Joel Yudken, also at Rutgers, emphasize the sectoral and regional effects of Pentagon procurement. The two argue that the military needs of the Cold War fostered a new industrial sector comprised of aerospace, communications, and electronics industries, "ACE" for short. While this seems a positive contribution by the Pentagon, the authors contend that these key industries grew behind a "wall of separation," dictated by the peculiar needs of the military and largely isolated from civilian markets. As whole communities and industries became dependent upon the Department of Defense for their survival, a "quiet industrial policy ... aimed narrowly at the newly emerging ACE industries" evolved. Meanwhile, in the absence of a counterpart civilian industrial or technology policy, traditionally strong American industries such as steel, automobiles, and machinery were left to "languish," while the "comparative advantage of the United States is increasingly confined to weapons systems and their high tech spinoffs."

In *The Rise of the Gunbelt*, Markusen and her colleagues describe how the military-industrial complex redrew the economic map of the United States. During the Cold War, defense spending and its oscillations became a major determinant of regional economic prosperity or decay. The West, South, and East coast reaped enormous gains from the distribution of Pentagon money, while much of the Midwest became a commercial rustbelt. Pentagon procurement policies raised income and productivity within regions but also increased the disparity between them. Two prime examples are California and Massachusetts, once the darlings of military technology, now in economic free-fall. As Michael Dukakis discovered when the Massachusetts miracle fell apart during his 1988 campaign, what the Pentagon in the early 1980s gave, defense cuts could take away. Markusen warns that the diminished role of defense spending will deprive the ACE industries of a longstanding engine, and leave them vulnerable to the caprices of market forces, or to companies supported by foreign governments.

A centerpiece of Markusen's argument is her analysis of "postmodern," military technologies—missiles, electronic warfare and satellites—which produce few commercial spillovers because the Pentagon's agenda tends to narrow the array of available technology.

Not entirely true, say the collective authors of *Beyond Spinoff*. They have written a truly groundbreaking book that calls into question Markusen's and Yudken's conclusions about the narrowing effect of military spending on the creation and diffusion of technology in the American political economy. Where the Rutgers authors emphasize a wall of separation, the Harvard group argues that most advanced technology is not only "dual use," but "multiuse." Microchips are used in missile guiding systems, children's toys, automobiles, and in the machines that manufacture the chips themselves. Furthermore, much of what we call innovation is a continuous process of incorporating small refinements over many years.

As the Harvard authors point out, "Companies compete on the basis of

existing products, not those yet to be created. For these products, companies engage in a very different process of innovation in which they seek constant, incremental improvements." It is upon these very rapid "incremental improvements" that competitiveness depends, not the once-in-a-while revolutionary developments in high technologies and science.

According to Alic, Branscomb, and colleagues, the Pentagon has been more nurturing of generic technology than some of its critics contend. The Defense technology establishment has been shrewd enough to appreciate that its own narrow interests in military technologies often depended on broader technical advances, of which the microprocessor is a signal example. Often pursuing broad technologies with no immediate military relevance, the Pentagon typically "financed rapid movement down the learning curve until commercial markets took over." Far from being serendipitous "spin-off," the Pentagon's strategy of sponsoring more generic R&D was often deliberate, though accidential spin-offs sometimes occurred, too. According to the authors, "Very few technologies proceeded effortlessly from defense conception to commercial application." Rather, this transfer of technology from defense to civilian applications reflected a complex Pentagon-led technology policy, quite at odds with America's general pretensions to laissez-faire.

In short, the "technological relationship between defense and commerce was much richer and more complex than the spin-off model implies." Many of our most dynamic postwar industries, such as semiconductors, computers, jet aircraft, and communication satellites would have developed commercial applications much more slowly without the involvement of the Department of Defense. Indeed, defense spending was not "just helpful" to these sectors, but "thoroughly dominated them during their formative years through the sheer volume of Pentagon spending." Notwithstanding the Pentagon's often parochial interests and its concern to bottle up some very sensitive technologies such as missile propulsion, encryption, and nuclear weaponry, technological innovation has a way of spreading.

Beyond its R&D role, the Pentagon has also been an important source of technical diffusion, particularly in the application of advanced manufacturing techniques. Here again, the Cold War has substituted for a civilian policy of what some have termed industrial extension. This diffusionary role played by the Pentagon has been emphasized in a recent report, "The Defense-Industrial Network," prepared for the congressional Office of Technology Assessment. The authors, Maryellen R. Kelly and Todd A. Watkins, argue that the bulk of Pentagon procurement goes to "dual use" firms that, unlike purely civilian American firms, are collaborative in their relationship with customers, technology vendors, subcontractors, and competing plants. This network was created by Pentagon technology policies mandating the sharing of expertise and information. The result is a highly-integrated, often efficient network of defense industries—our only equivalent to Japan's *keiretsu* system. In that system, large companies support enormous networks of suppliers, to which they diffuse advanced

manufacturing techniques and quality controls; they also provide long-term markets, which allows small subcontractors to invest in advanced capital equipment. Although some commercially-oriented American firms, such as auto makers, do have supplier networks, they provide neither the diffusion nor the permanent partnership of the *keiretsu* system.

According to the OTA report, however, the industries constituting the defense supply network include some of the most advanced and vital sectors of our economy with respect to capacity and efficiency. This is particularly true of the plants producing manufacturing technology and equipment, such as the incorporation of computer-aided design into advanced industrial machinery. To waste this developed capacity during the process of conversion would be devastating.

On balance, the depletionists have a strong case that the Cold War put regional "gun-belt" economies at the mercy of defense spending, and that a defense industrial policy developed at the expense of a civilian one. But they have overstated the association between the military-industrial complex and economic decline. The pre-emption of resources by the Department of Defense, though a contributory factor, was only a part of the problem. Moreover, in its day, a Pentagon-led technology policy was probably the best we could have managed. It is doubtful that the American political culture would have tolerated a "civilian" industrial policy during the Cold War. Perhaps it was only possible to have an industrial policy which was cloaked by urgent concerns of national security. Further, some of the skewing of resources had less to do with the size of the defense economy than with other effects of America's hegemonic role. For example, the federal government has placed controls on the export of technologies thought vital to national security. These export controls have prevented American industries from capitalizing on defense-produced technologies in global commercial markets, while our competitors emphasized commercial sales and burdened their producers with fewer controls.

The several critics agree, however, that a new era requires new technology policies. The authors of *Beyond Spinoff* agree that the Pentagon's dominant role in high-tech R&D has had constraining, as well as facilitating, effects. The former include arcane contracting requirements, a cost-plus approach to procurement, security restrictions on technical data, and some relationships with producers of esoteric products that are virtually wards of the military. However, rather than proposing to scrap the Pentagon role entirely, the Harvard authors offer a variety of recommendations to take advantage of the "dual-use" potential of military procurement and R&D support, to lower the wall cited by Markusen.

Their title, *Beyond Spinoff*, is intended as both a call for a more sophisticated understanding of how the Pentagon has influenced technology, as well as a plea for us to recognize that, however beneficial Pentagon patronage of technology may have been in the past, it is no longer sufficient. During the post-war years we could afford to overlook the inadequacies of an indirect technology policy since international competition posed little economic threat. The new

era is characterized by two key differences: increased global competition and a diminished presence of the Pentagon as a covert source of industrial policy.

Both sets of authors call for a new national technology policy. Where the Harvard group still sees a major role for dual-use, Pentagon-led R&D, Markusen and colleagues want the whole shooting match to be civilianized. They call for a set of regional economic development policies not dependent on the Pentagon at all, as well as a comprehensive conversion policy for both industries and workers.

The Other Conversion

How may our own past inform conversion planning now? As America prepared for World War II, officials carefully studied the recent history of their own era, and were determined not to repeat the mistakes of World War I. We can similarly profit by examining the conversion and reconversion experience of World War II. The debate surrounding the conversion to a wartime economy began in 1939, when the architects of war mobilization were busy designing and building what would become known around the world as the Arsenal of Democracy. The public, industrial leaders, and politicians understood that this mobilization would be reversed at war's end.

The Second World War marked America's introduction to large-scale national economic planning, and the military's potent influence on investment in technology and innovation. At war's end, the American public and its politicians believed that the future prosperity of America depended upon a smooth transition to peace, and that reconversion was an opportunity to change the direction of the nation. Though our future is as foreboding at the end of the Cold War, no such agreement exists in the 1990s.

The robust macroeconomic performance of the U.S. economy during the post-World War II reconversion was unprecedented. The conclusion of past wars had brought economic dislocation—inflation, unemployment, or both. But in 1945-46, high employment prevailed and only a short rise in the general price level occurred, thanks to newfound purchasing power and the increased productive capacity of American industry—both legacies of the mobilization.

This happy result reflected both fortuitous circumstances and deliberate planning. War bonds provided the savings for consumers to indulge their pent-up demand for consumer goods. The GI Bill functioned both as an income-support and a retraining policy. The release of controls on the production of consumer goods, particularly consumer durables, allowed supply to meet demand without unacceptable inflation. This enormous pent-up demand for badly needed refrigerators, cars, and washing machines fueled the reconversion of production to former peacetime production schedules. Investment in war production had recapitalized American industry, and led to a profusion of new technologies. Finally, the government did have a policy, albeit a truncated one, to lubricate the transition from military to commerical production.

By contrast, no such backlog of demand exists in 1992. Nor has the American industrial plant been recapitalized; on the contrary, its capital is substantially depleted. There is no counterpart to the GI Bill as a retraining or income-sup-

port policy. Indeed, the unemployment level is high, wages are low, and Americans are not in the mood to spend money.

The government's reconversion role at the end of World War IIwas cut short by Roosevelt's death and the headlong rush to decontrol that followed. But there was far more conversion planning than there is today, in part because there was a much greater acceptance of economic planning during the war. The federal government had mapped out the country's industrial transition long before the ending of hostilities. To start with, the government negotiated the cancellation of over 300,000 contracts, which involved a potentially devastating financial commitment of $63.5 billion. The Office of Contract Settlement, legislated into existence in 1944, began its work early; by 1945, it had settled of five out of six of these contracts through advance payments and loans, an appeals boards, and extensive training programs.

Furthermore, the Surplus Property Act of 1944 authorized the sale of government-built warplants to private business. These facilities were often sold to firms at 20% of their market value. They amounted to well over one-half of the value of all manufacturing plants in existence in 1940.

Despite the continuation of abnormally large profits accruing to business after the war, the Revenue Act of 1945 called for an immediate repeal of the excess profits tax. This law also repealed the capital stock tax and lowered corporate taxes, placing the business community in a strong postwar financial position. A Tax Adjustment Act, passed in July of 1945, raised exemptions and sped up refunds and credits, again ensuring the postwar financial strength of American business.

Despite its broad success, the reconversion process was far from perfectly smooth at the local level. After V-J Day, the overnight cancellation of some $24 billion in war contracts triggered strikes, massive layoffs, and job-downgrading throughout industry. Unemployment reached almost two million by October 1,1945, and isolated pools of unemployed workers dotted the country.

The Brewster Aeronautical Corporation, for example, was given only a moment's notice that its contract for Navy fighter planes was terminated. The corporation's 9,000 workers staged a "stay-in" strike, demanding permission from the government to begin the manufacture of household appliances. In the end, Brewster's Long Island City plant was closed, its tools equipment and parts were auctioned off, and its workers took to the streets.

Still, the problems during the reconversion of 1945-46 remained largely local and contained; without the federal government's guidance, they might have exploded into a national trend. And by 1948, as the Cold War dawned, a more protracted form of military stimulus reshaped our political economy. What remained of the arsenal of democracy was slowly transformed into a semi-perpetual Cold War machine which provided enough technology and growth for our economy to rule world markets.

Today, the lack of an identifiable enemy, coupled with the rise of foreign competition, increases the urgency of a coherent conversion policy. The Cold

War economy has become a way of life for many industries having no memory of competing in the market. To date, only piecemeal attempts at conversion policy have been made. The funding set aside in the Defense Authorization Act of 1992 for retraining, community adjustment, and dual-use technology is but a small lever facing a mountain of structural problems. Without a clear policy from the federal and state governments, contractors will continue to diversify, lobby for cutback restraint, lay off workers, and wait for another war.

A high-profile agency outside the cabinet and directly responsible to the president may be the solution. Such agencies were successful during the World War II because they could operate freely, and were regulated mainly by public opinion. Markusen has argued for a Temporary Office of Economic Conversion that would develop conversion programs, work to get cooperation from local and state governments, and generate data on conversion, and endeavor to reconstitute the networks of diffusion. It could advise on the size and composition of future budget cuts and coordinate the departments of Labor, Commerce, and Defense. It would also have an advisory board made up of representatives from defense, labor, unions, professional science and engineering associations, and state and local development offices. It would remain small, achieving its goals through technical and financial assistance.

After more than four decades of reliance on the Cold War as the organizing principle for the American economy, we need a different path. Only a concerted effort at conversion, easing the adjustment of communities, conserving the manufacturing capabilities of the defense industries, and launching a technology policy aimed at diffusion, will suffice.❖

Divided They Govern

Richard M. Valelly

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Since 1981 American voters have kept the national government divided between the two parties. We have had a Republican White House and a Democratic Congress, except in 1981-87, when Republicans narrowly controlled the Senate. This pattern, of course, could change if the Democrats retake the White House in 1992.

Polls suggest that voters increasingly approve of divided government. In 1981, 47 percent of the electorate preferred unified government, while 34 percent preferred divided government (the rest taking an agnostic view). By 1989 these preferences had reversed: Now 45 percent approved of divided government and only 35 percent backed unified government, though very recent polls suggest some second thoughts. Paradoxically, voters evidently dislike what they have wrought. As divided government has persisted, voter frustration has increased. Indeed, divided government can be seen as both a symptom of voter disaffection, and a cause.

Divided government appears to increase public cynicism about politics in two ways. First, when divided partisan government intensifies the separation of powers of the American constitutional system, government becomes stymied. Citizens, like the Founders, may think they are dividing government to keep the rascals from doing damage. Yet the resultant policy inaction sows deeper cynicism about politics and government. Second, divided government creates a climate of scandal-mongering, in which each branch of government expends political resources embarrassing the other (Watergate, Iran-contra, the S&L scandals, Iraqgate) rather than jointly tending to the national business. Over time, this

discredits both parties, blurs responsibility, and generates still more voter contempt for government and politics generally.

This analysis is seductive, and at least partly true. However, several recent books suggest it is overstated. Though we think of it as a characteristic of the 1980s, divided government has recurred regularly since the 1940s. In only eighteen out of the past forty-six years has the same party controlled the White House and both houses of Congress. The Nixon presidency, a period of legislative activism, coexisted with Democratic control of the House and the Senate. Divided government was also common during the nineteenth century.

What's New, and What's Not

In a deeper sense, we have lived with divided government since the Founding. Reacting to the Articles of Confederation, the Founders believed that the Constitution favored strong, if restrained, government. But much of American political thought since then—from Theodore Roosevelt and Woodrow Wilson to Richard Neustadt and Walter Dean Burnham—can be read as a recurring judgment that the Founders constrained government far more than they empowered it. It takes strong politics and a mobilized electorate to overcome the constitutional bias against government activism.

In the sweep of American history, bouts of effective governmental activism have been rare: the Civil War and Reconstruction Congresses, Woodrow Wilson's cooperation with party leaders in the Congress, Franklin D. Roosevelt's two strong working majorities in 1933-34 and 1937-38, LBJ's partnership with the 89th Congress in 1965-66. The ticket-splitting of the 1980s is more the rule than the exception—a case of the constitutional chickens coming home to roost. Still, the current era has generated more than a normal amount of squawking about accumulated problems that government seems unable to solve. The federal deficit has deprived government of resources to address national concerns, and the magnitude of the deficit itself stands as a monument to government's failure to act. So the electorate has evidently locked itself into a vicious circle of ticket-splitting, policy inaction, discontent, disaffiliation—and more ticket-splitting and more paralysis. Even if Bill Clinton should win the White House in November and enjoy a working majority in Congress, the process of political repair will have only begun.

According to several new studies by political scientists, however, we should not exaggerate the perils of divided government nor, by implication, the virtues of unified government—let alone more radical reform proposals imagining a move toward parliamentary government. These new studies add badly needed complexity to the conventional views that blame divided government, willy nilly, for a multitude of sins.

Where most of the new studies fall somewhat short, however, is their failure to explore adequately the connection between divided government and perceived or real paralysis—and the resulting damage to public confidence in government itself and to key democratic norms. For one thing, divided government yields less accountable government. If both parties are the in-party, then

policy failures are everybody's fault—and nobody's. Unified government may not be sufficient to revive strong politics, but it is probably necessary, at least in the current climate.

Divided government can also be a political red herring. For example, Republicans have long insisted that their failure to consummate a domestic program is the fault of Democratic control of Congress—control that is itself illegitimate, reflecting gerrymandering and the power of incumbency. The GOP 1992 platform states: "After more than half a century of distortion by power-hungry Democrats, the political system is increasingly rigged." The platform blames the chronic deficit on Democratic control of the Congress, and adds, "The only solution is to end divided government."

It is necessary to sort out the dynamics of divided government—where it came from, how it works, what can be fairly blamed on it, what unified government might portend—and what reforms are needed to reclaim politics, irrespective of divided government. One can begin by differentiating the causes of divided government from its consequences.

Causes of Divided Government

Political scientists generally make two kinds of argument about the causes of recent divided government. The first argument emphasizes the behavior of *politicians*, contending that factors such as congressional incumbency, or candidate-recruitment, tends to advantage one party over the other. Some of this literature views the past decade as an aborted realignment. Voters gradually shifted their presidential allegiance toward Republicans, but for a variety of structural or tactical reasons Democrats were able to cling to their control of Congress. The second view emphasizes the behavior of *voters*, and concludes that the voters' choice of divided government was rational, deliberate, and purposive.

A Rigged System? Drawing on three extensive academic literatures (on the electoral effects of congressional incumbency, reapportionment politics, and realignment), Newt Gingrich and other key Republicans view divided government as the product of Democratic success at riding out, through devious means, the electoral "right turn" that began in 1980. The case has superficial plausibility, since professional politicians do rationally protect their careers and incumbents have indeed gotten re-elected more reliably than in the 1940s and 1950s.

Already advantaged by comfortable vote margins for all congressional incumbents, House Democrats supposedly used their committee positions to build up large war chests. Congressional Democrats also blanketed their districts with newsletters, shoring up the name recognition that helps re-election. Another part of the same "rigged system" were state legislatures — most of which are controlled by Democrats. These legislatures supposedly gerrymandered congressional districts to insulate House Democrats from an increasingly suburban electorate that gave Ronald Reagan a landslide in 1984 and George Bush a strong victory in 1988.

But though incumbents do exploit office, the "rigged system" thesis largely

fails to explain divided government. Its fallacies are ably explored by Gary Jacobson and Morris Fiorina. If the system were rigged, why have Democrats done better in open House races? Why did they lose the Senate in 1980 and win it back in 1986?

While gerrymandering does occur, it doesn't explain lingering Democratic control of the House. Since 1952 Republican presidential candidates have received a significantly higher fraction of the vote than have Republican House candidates. Reagan got 57 percent of the national vote in 1984, but House Republicans got only 47 percent. For the most part, Republicans fail to capture the legislative branch because they attract fewer voters.

Incumbents appear strong, but their longevity can be exaggerated. Only 10 percent of those in the House in 1990 were there in 1968, even though incumbent vote margins have grown since then. As for campaign finance and incumbency, a big war chest can certainly scare away a strong challenger, leaving a seat effectively uncontested. But during the 1980s Republican challengers were much better endowed than Democratic challengers.

Do Democrats Have Better Candidates? A much more convincing argument holds that Democrats cling to legislative office, at all levels of government, because they field more attractive candidates. As both Alan Ehrenhalt and Gary Jacobson suggest, the Republicans have had a serious problem in candidate recruitment—one of the reasons why they have put effort into converting conservative Southern Democrat office holders to the GOP.

Democrats obviously have a more visceral commitment to politics and government than government-bashing Republicans. With the exception of able patricians like William Weld and James Baker, or such serious, supply-side intellectuals as Phil Gramm and Jack Kemp, talented conservatives tend to act on their creed and stay in the private sector. But talented Democrats, because they actually like government, will put up with the stress, long hours, constituent abuse, and the relatively low pay of local and state office, which in turn serves as a recruitment pool for congressional candidates. So Democrats often do have better candidates—a reality that grows out of their ideology.

Are the Voters Fools? A very different brand of explanation for divided government centers not on politicians but on voters. In this view, the voters are getting roughly what they want. Republican challengers were unlucky enough to pursue clear partisan realignment just when partisan loyalties, steadily weaker since the 1950s, were becoming too thin to support such ambitions. Most electorally active people have some kind of partisan loyalty, but increasing numbers no longer buy the party's entire program. Thus Republicans are split on cultural, social, and economic fault lines—and many Republican presidential voters hedge their bets by backing Democrats for Congress.

Voter ambivalence may be all too genuine. The electorate believes, for instance, that deficits ought to be reduced but also agrees, when asked by pollsters, that budgets for particular worthy purposes, such as the environment and education, ought to go up.

Fiorina, Jacobson, and others suggest that increasingly the voters active in both presidential and congressional elections, who happen to be better in-

formed voters in general, are adopting some basic rules of thumb. There are quibbles among these analysts about the degree of sophistication, but all agree, first, that voters see the parties as offering different policy benefits, and, second, that voters associate their own preferences with a Republican presidency and a Democratic Congress.

Congress cannot face up to expansionist dictators and "evil empires" nor can it broadly steer the economy, but the president can hardly be an ombudsman for a constituent with a Social Security problem. When weakened party loyalties and increasing distrust of government are factored in, the result is enough ticket-splitting to get divided government.

Fiorina is convincing when he notes the historic, system-wide pervasiveness of divided government. Since 1946 divided government has also spread rapidly to state politics, often pitting Republican executives against Democratic legislatures. For Fiorina, this suggests that more and more voters intend divided government and have become sophisticated ticket-splitters. Unified government may well become the exception, not the rule.

While Jacobson and Fiorina offer quite believable arguments—in Fiorina's case, enhanced by simple but ingenious modelling—the direct evidence for sophisticated voting is still only inferred from survey evidence. The great virtue of the thesis, however, is that it treats voters as purposive: Voters are far more wary of government and politicians than they used to be, and a near plurality seems to like divided government even now, despite its chaotic results. Fiorina rightly calls for more research into ticket-splitting so that we can know just how much sophisticated voting is going on, and, in the meantime, urges skepticism about the view that divided government is an evil.

In short, political science research does not find much support for the contention that divided government is the result of illegitimate tactics by careerist Democrats. The Democrats include effective career politicians, of course—that's one of their strengths as a party. But true electoral realignments sweep aside yesteryear's "in party." We didn't have—nor could we have had—such a realignment in the dealigned 1980s. The real story is that Democrats went into the 1980s with advantages in legislative electoral arenas that the Republicans lacked, mirrored by disadvantages on "presidential" issues and presidential candidates that Republicans exploited.

If this approach explains the rational causes of divided government, what about the consequences? The ticket-splitters in the electorate, after all, do not make up a majority. What if they unintentionally (and, for some, deliberately) stuck the rest of us with governmental deadlock and political decomposition? Does the cool, rational logic assumed in the new analyses of divided government's electoral origins also explain its consequences?

Consequences of Divided Government

Divided government seems to hobble governmental effectiveness in a variety of ways. However, these concerns are tempered when one takes a longer historical view, as do political scientists David Mayhew, David Rohde, and others. In the literature, three broad problems are attributed to divided

government: policy inaction or incoherence, an obsession with political scandal, and an erosion of the political efficacy of the parties.

Policy Inaction, Flawed Legislation. The culpability of divided government is strongest on government's deferral of pressing problems, notably in economic and fiscal policy. Ginsberg and Shefter provocatively connect the national-level divided government of the 1980s to economic decline, fiscal irresponsibility, policy inaction, a failure to plan for economic competitiveness, and a subordination of national economic goals to a national security alliance with Japan. Each party is more devoted to retaining institutional strongholds than to fashioning as coherent national strategy.

Just how convincing are such charges? To test the hypothesis, David Mayhew did much tedious work, compiling a list of "important" legislation for the 1946-1990 period (during which the national government was often divided), 267 statutes in all. Mayhew's list was derived from the conclusions of leading reporters, policy analysts, and historians. He found that the rate of important policy making did not vary systematically across periods of unified or divided government.

Mayhew notes that most important legislation in the postwar period, 186 laws, passed with either two-thirds support or bipartisan majorities. He observes that Congress, contrary to its reputation, is more of a problem-solving institution than we often think—simply because most of its members are committed to the ideal of making good public policy, as well as to the goals of getting re-elected and achieving influence within Congress. Also, legislation doesn't come easily. To sustain a bill through all the veto points in the process requires legislative leaders to fashion majorities much larger than 51 percent.

Presidential skill, furthermore, doesn't neatly coincide with unified government; it can be found during divided government, as Reagan, Nixon, and Eisenhower showed. External events that demand problem-solving do not coincide systematically with unified or divided government. Finally, in a serious discussion of a phenomenon often dismissed by political scientists as being too soft for analysis, Mayhew shows that public moods demanding strong government span periods of both divided and unified government. There are constant policy making pressures in Washington, surges of activism, often that last many years. Over the long run, both factors favor a rather high level of activism and policy making, divided government or not.

Is this view of the matter dispositive? Not wholly. Consider budget legislation in the 1980s. For many, the failure of government to match revenues with expenditures is the signal failure of divided government—Democrats successfully defending outlays and Republicans successfully cutting taxes. However, while divided government in the 1980s made this straddle possible, no such fiscal default occurred during the sixteen years of cumulative divided government under Truman, Eisenhower, Nixon, or Ford. The new element that associated divided government with fiscal excess in the 1980s was the fierce Republican embrace of what George Bush once aptly called "voodoo economics." None of Reagan's Republican predecessors believed that you could cut taxes and increase revenues.

On the spending side, Mathew McCubbins' article in the Cox and Kernell volume (written in the spirit of the volume's persistent focus on parties) focuses on party conflict in a "bi-lateral veto game" and its resolution. He conceptually strips spending politics down to a stylized conflict over two types of programs, domestic spending and defense spending. Democrats preferred increases in one and reductions in the other, and vice versa for Republicans. The outcome is basic game theory: since neither side could get its first preference (more for its side, less for the other side), they both agreed on the second preference (more for both sides). The result, of course, was persistent, upward pressure on the deficit. Historically, Mayhew finds no such clear relationships between divided government and fiscal imbalance. But McCubbins' emphasis on defensive partisan behavior in a fragmented system nicely captures the dynamic of fiscal blockage, at least in the supply-side era.

On the tax side, a key piece of legislation, the Economic Recovery Tax Act (ERTA) of 1981, played a very important role. Startled by the results of the 1980 elections, Democrats sought to shore up business support for the next election. Both parties competed to take credit for a supply-side bill that would spark economic recovery, setting off an infamous "bidding war" that would have been improbable in a unified government. In a concise article in the volume edited by Alberto Alesina and Geoffrey Carliner, Charles Stewart analyzes ERTA and other tax legislation in the 1980s. He estimates that about 90 percent of lost revenue over the 1980s due to tax cuts is attributable to ERTA. Given Reagan's resoluteness in blocking major tax increases, divided government made it impossible to recover lost revenue. Modest income and corporate tax increases as well as a large increase in Social Security taxes occurred, but tax legislation after 1981 tended toward "revenue neutrality."

Divided government from 1981 to 1992 invited, in other words, complicated patterns of "gaming" between the two parties on spending and taxing that, in turn, created a chronic deficit problem. Its real economic consequences are still being debated—periodic fiscal imbalance has been common in U.S. history since the Civil War, as Charles Stewart astutely points out in the Cox and Kernell volume. But in the current era of government-bashing and festering economic and social problems, fiscal imbalance has symbolized government failure.

Increased public cynicism has probably been reinforced by the savings-and-loan scandal, a colossal case of bipartisan failure. In a lucid, sobering treatment of the "thrift debacle" in the Alesina and Carliner volume, Barry Weingast and Thomas Romer show convincingly the bipartisan, political origins of the crisis, emphasizing incentives and informational biases. The public was ill-equipped to assess the issue and was not cohesively organized as the thrift industry was. Since every member of Congress had many thrifts in his or her district or state, Congress tended to accept the available arguments. These favored, first, deregulation and, later, forbearance—letting the industry take time to work its way out of its difficulties.

Explicit treatment of divided government plays little role in the Weingast-

Romer analysis. But their own account hints that Congress and the administration jointly delayed remedial action because they feared raising taxes or worsening the budget deficit—itself partly the product of divided government. In addition, the S&L scandal, like the deficit itself, suggests how divided government permits blame-sharing as well as credit-sharing. Both public deliberation and accountability suffered as a result of a blame-avoidance game. On balance, the contribution of divided government to policy inaction and flawed legislation from 1946 to 1990 across many policy domains is hard to prove, just as Mayhew says. But from 1981 on its contribution to economic mismanagement gets stronger, a point broadly consistent with more pessimistic analyses, such as Ginsberg and Shefter's *Politics By Other Means*.

Divided government has also been blamed for foreign policy incoherence. During the Iran-contra hearings, former National Security Adviser Robert McFarlane cited the Boland Amendment (prohibiting aid to the contras) as destructive foreign policy meddling. First Congress drew the line here, then it drew the line there. Circumventing Congress came easily—for who knew what Congress wanted?—but the process of circumvention damaged policy. Yet the problem with the general argument of foreign policy incoherence, as Mayhew points out, is that the country is never unified for long on foreign policy, even under unified government. Divided government may well add healthy checks and balances—as both the contras and the Sandinista party know.

In fact, divided government has often been associated with initiatives now recognized as statesmanlike, the most famous case being the Marshall Plan, launched during the "do-nothing" (read Republican-controlled) 80th Congress. There is simply no way, using any imaginable set of criteria, to judge foreign policies produced since 1946 under unified control as being consistently superior to those fashioned under divided control.

Scandal-mongering. Ginsberg and Shefter argue that divided government in the 1980s encouraged "politics by other means." If Democrats couldn't win the presidency, they investigated and harassed the president's subordinates, while Republicans anxious to control the House used the ethics machinery to discredit the House leadership. If interest groups couldn't rally voters, they could buy elected officials. In time, the public reasonably drew unflattering inferences about people inside the Beltway: a plague on both their houses.

For some observers of American politics, a continuing round of ethics scandals feeds the kind of paranoia about government that Oliver Stone exploited with "JFK," a plausible point about the political origins of public cynicism. Equally serious, a certain administrative incoherence and timidity can set in. Administrators, wary of scandal, became excessively cautious. Appointments go unfilled, and talented people take a pass on a job offer because of some youthful indiscretion that could invite smears long afterwards.

There are, then, three related claims about scandal-mongering. Divided government increases the rate of political scandal; that in turn increases public cynicism and hobbles government's ability to implement policy. But the rate

of scandal-making does not vary systematically across periods of unified and divided government. Mayhew counted for the period 1946-1990 the number of days that the congressional committee investigations of the presidency, or executive response, were featured on the front page of *The New York Times*. There is no systematic relationship between periods of unified or divided government—none at all.

Capitol Hill launches investigations for at least two other reasons, factional and constitutional. Indeed, as Mayhew points out, a period of unified government can be associated with investigations that set the stage for tensions in a particular administrative or policy domain that will last for decades. If so, the case for a relationship between divided government and public cynicism and administrative incoherence is weak.

Scandals during both divided and unified government often reflect constitutionally mandated tensions. The Watergate and Iran-contra affairs, both associated with divided government, of course had political dimensions. But they also dealt with quite serious constitutional issues. Moreover, to dismiss recent crises of government as mere "scandals" is to trivialize the stakes. In Watergate and Iran-contra, or in lesser imbroglios, crimes and misdemeanors against democratic government all demanded scrutiny and response. The rate of congressional investigation in the post-World War II period (and probably the pre-World War II period) is at best only weakly correlated with partisan divided government. Party factions will go after one another as easily as different parties. And concerned congressional leaders will walk away from party loyalty toward the Constitution.

Death of Responsible Party Politics. An article of faith among most political scientists is the unimportance of parties within the Congress. As subcommittees and staff proliferated, abetted by the collapse of deference to leadership or any commitment to apprenticeship, such irrelevance grew. Congress is therefore unruly, hence the recurrent magazine covers picturing Congress as a baby in diapers. Mayhew summed it up best, in an earlier, well-known book, *Congress: The Electoral Connection*: "No theoretical treatment of the United States Congress that posits parties as analytic units will go very far ... we are left with ... 535 men and women rather than two parties..." All of this is supposedly compounded by divided government.

President Bush has set a modern record of thirty-one vetoes in fewer than four years. This has only sharpened the sense that running Congress is not an advantage for the Democrats as a party, and that minority status in the House has transformed Republicans into a kind of Weather Underground in suits. Committee barons freelance, Speaker Foley lacks fire in the belly, and everyone hustles money, subverting the party's historic social commitments. Meanwhile Newt Gingrich plots the fall of the Republic, or at least of the Congress.

There are two claims here: divided government thwarts partisan cohesion, organizationally and programmatically, and it intensifies illegitimate free-lancing, legislatively and in congressional campaign finance—or in a poisonous blend of the two. But this picture is also overstated, or just plain wrong. Rohde's finely counterintuitive analysis shows that party government is alive and well

in the House of Representatives since the reforms of the late 1960s and early 1970s. His work is part of a renewed interest in congressional parties that can also be found in the Cox and Kernell and Alesina and Carliner volumes.

Rohde demonstrates a marked increase in party government in the House and Senate. To be sure, notwithstanding structural changes in legislative party cohesion, a Speaker's style can matter enormously. (Speaker Wright was a strong partisan and Foley a relatively weak one.) But, on the whole, far from weakening the Democrats and Republicans as coherent legislative parties, divided government has been associated with a strengthening. Rohde convincingly constructs a party cohesion index—that is, the proportion of votes on which a House or Senate Democrat supports the party position. The low for the House was reached in 1970, 27 percent, but by 1987 it had shot up to 64 percent; in the Senate it ranged from 35 percent to 52 percent in the same period. From the 92nd to the 94th Congresses, about 8 percent of the House was involved in the Democratic whip organization, but the percentage increased steadily to 40 percent by the 101st Congress.

During this period the Speakership was strengthened, becoming the apex of a system composed of regular whip planning meetings, policy-planning task forces, a Steering and Policy Committee, the Democratic Caucus, and the Democratic Study Group. The Rules Committee changed from being an obstructionist body to an operation that facilitated the Democratic Party agenda through increasingly sophisticated—and for Republicans oppressive—use of rules. Greatly aiding these changes was a sharp decrease in sectional tensions within the congressional Democratic Party, the result of the Voting Rights Act's impact on Southern politics.

Speaker Wright used this new system during his brief tenure to enact a party agenda, echoing earlier, now forgotten efforts and successes by Carl Albert and Tip O'Neill, both of whom forced strong, anti-recession measures on reluctant Republican presidents, in 1975 and 1983. Both the Clean Water Act and the Highway Reauthorization were enacted over Reagan's vetoes. Also passed were important savings and loan, welfare, farm credit, catastrophic health insurance, trade, and homeless bills. Indeed, Rohde's evidence suggests that policy-planning and programmatic cohesion grew during the 1980s within the congressional Democratic Party. Forthcoming work by James Shoch of Dartmouth College, on trade policy, and Chris Howard of MIT, on social policy, will strengthen this implication of Rohde's research.

Nor is it clear that divided government promotes corrupt campaign finance. What does seem clear is that divided government in the 1970s helped stimulate the monitoring systems which generate the data that public watchdog groups use to call public attention to finance issues. On balance, public awareness of money's role in politics seems to have been helped by divided government. This isn't to dismiss the issue, which is too often ignored and misunderstood. Greider's controlled outrage in *Who Will Tell the People* wakes one up to it. Yet it is not analytically clear whether, or how much, divided government reinforces the power of organized money and social class in politics.

The overall case that divided government destroys parties is at best mixed. As Rohde suggests, party cohesion and ideological coherence, as well as coordinated policy planning, may actually grow under divided government. At the same time, party cohesion does not assure party accountability; and parties that do not seem accountable are parties that engender voter distrust.

Moreover, a party that shares governance may have difficulty functioning as a clear opposition. Divided government can increase collusion between the parties to avoid blame for policy inaction or failure, which in turn intensifies public cynicism against the whole system.

In sum, divided government cannot have been the sole foundation of the recent crisis of governance. Its critics are putting too much explanatory weight on a pattern of electoral outcomes that has recurred since World War II, and that was common from the end of Reconstruction to the rise of McKinley. In the form it took from 1981 to 1992, divided government did, however, make it easier for government to become associated with major symbols of political failure, such as the chronic deficit and the S&L debacle. But restoration of public confidence will require more than control of both branches by the same party.

Political Renewal

Given America's constitutional institutions, political culture, and recent history, how shall we go about renewing politics? As James Morone's exceptionally interesting book shows in rich, historical detail, American political culture is deeply anti-political. American history is punctuated by political surges full of democratic yearning that well up from below. In many of them, people seek to abolish the messiness of politics in the name of "the people" and install a government founded in transcendental values of American community. The popular base of the Perot movement was a typical example.

Such democratic surges often ossify into the creation of new interest groups, and new allied federal agencies, such as the National Labor Relations Board in the 1930s, or the new environmental agencies of the 1970s. Yet the proliferation of constituencies and agencies only adds to the system's ungovernability. Thus, the stage is regularly set for broad disillusionment with politics, reinforcing the anti-governmental thrust of American political culture.

In ground-breaking work, the late Jack Walker constructed the first, reliable "census" across time of interest groups. He found that the older view of "stable unrepresentation" in the group system (to use a term coined by William Gamson of Boston College) no longer captures interest group politics. Gaps in group representation have closed steadily since the 1930s due to constant intervention into the associational system by government and private "patrons," such as foundations, philanthropies, and the media. For example, when the Kennedy administration established state-level commissions on the Status of Women, it laid the basis for the formation of the National Organization of Women, just as liberal foundations helped to finance the voter registration drive of the early 1960s.

Indeed, since the 1960s, the political system has been characterized by burgeoning interest groups—and declining electoral participation. Voter turn-

out and partisan affiliation have both decreased. As Ginsberg and Shefter observe, electoral politicians no longer have to engage in mobilizing the electorate. Today's politicians are all too comfortable with the "low voter turnout" environment in which they compete. It is a predictable milieu, and changing it is against their career interests. Thus, as the interest group system has become more pervasive and inclusive, the broader citizenry, paradoxically, has become more frustrated.

Perhaps, contrary to William Greider's title, The People don't need to be told—they have already grasped the intractability of representative government and have channeled their political impulses into avenues outside those mediated by party and election. Paradoxically, the number of political activists has increased just when millions have become electorally inactive. Reintegrating group activism with representative government and effective parties will be very tricky, for interest groups often seem to operate at the expense of parties, treating them as flags of convenience. (See Karen Paget, "Citizen Organizing: Many Movements, No Majority," *TAP* No. 2, Summer 1990, and John Judis, "The Pressure Elite," *TAP* No. 9, Spring 1992.)

Moreover, as William Greider suggests, because of the fragmentation and particularism of interest group politics, the gain to inclusion is no match for the power of money. Also, the crisis of the labor movement—the most embracing and aggregating group of ordinary voters—has reopened gaps in representation. Hence the paradox of the contemporary system of representation: More Americans are highly active in politics, via interest groups. Yet in an age of partisan disaffiliation and group fragmentation, Americans are more disconnected than ever before. What gets lost, finally, is appreciation of democratic politics and government as aggregative and collectively valuable activities.

This, unfortunately, is the larger context for political renewal. For some analysts, such as those who formed the Committee on Constitutional Structure, the fate of the Carter Administration and the legislative and fiscal stalemate of the Reagan-Bush era suggest institutional and procedural reforms to create genuine unified government. In this view strong parties, a strong presidency, unified government, and responsible government all go together. Hence key figures associated with the committees, such as Lloyd Cutler and the Brookings scholar James Sundquist, call for constitutional reforms that would make our system more like parliamentary government. These include such ideas as "team tickets" (that is, voting for presidential, House, and Senate slates together), and changing congressional terms to give presidents time to see a program through. But these reforms, though appealing, are improbable, and they beg the question of how to redeem democratic citizenship under our present constitution.

One obvious inference is the need for stronger parties, to enlist citizens in the business of politics and to bridge the constitutional separation. Without strong parties, even "unified" government can itself become a kind of divided government, as the Democratic Party has often been throughout its history. Without a strengthened Democratic Party, a Clinton administration could go

the way of the Carter administration, succumbing to the still potent factionalism in the three party groupings—the Democratic Leadership Council, Jesse Jackson and his various constituencies, and the AFL-CIO/Kennedy alignment. A Clinton administration, like Reagan—and unlike Carter—would have to take advantage of the party-building opportunities of White House incumbency.

Deepening voter alienation also reflects the widespread perception that the political deck is stacked—that only insiders have influence, that money talks louder than votes, and that both parties are corrupted. Greider's muckraking uncovers damning details about how money talks and constricts national debate about what's feasible. Here again, ordinary people are denied political influence for reasons deeper than the fact of divided partisan government. Fundamental campaign finance reform is only the beginning of a cure.

Political efficacy, citizen participation, strong parties, and government competence are mutually reinforcing. In the heyday of the New Deal coalition, notwithstanding its exclusions, each factor operated in tandem with the other to make for a strong polity, and invited further inclusion. Since the late 1960s, that cycle of reinforcement has ended. Divided government has compounded this political reversal.

But unified government—under the Democrats, at least—would have to work mightily to repair the damage. Political renewal can perhaps be built on the upsurge of citizen activism, but it will have to take care that such activism does not come at the expense of parties, or of voter confidence in the polity as a whole. Certain measures, like the "motor voter bill" recently vetoed by President Bush, or fundamental campaign finance reforms, point in the right direction. But they only whet one's appetite for a whole new genre of strategies to reclaim politics.

When all is said and done, it is hard to imagine political renewal occurring in the absence of a strong president who has a working majority in Congress and a healthy partisanship. In that sense, those who associate democratic decay with divided government are partly right after all.❖

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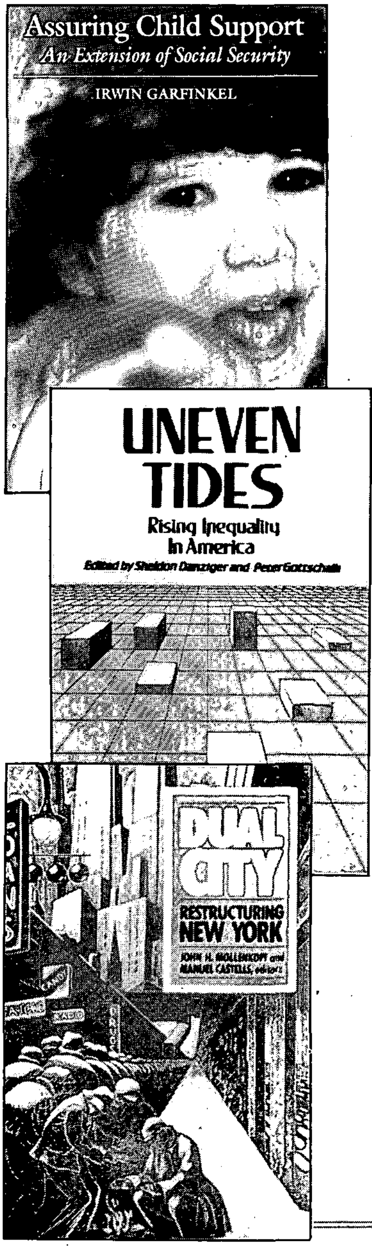

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